

DOE'S FIXED-PRICE CLEANUP CONTRACTS: WHY ARE COSTS STILL OUT OF CONTROL?

HEARING BEFORE THE SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS OF THE COMMITTEE ON COMMERCE HOUSE OF REPRESENTATIVES ONE HUNDRED SIXTH CONGRESS SECOND SESSION

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THURSDAY, JUNE 22, 2000

HOUSE OF REPRESENTATIVES,
COMMITTEE ON COMMERCE,
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:07 a.m., in room 2322, Rayburn House Office Building, Hon. Fred Upton (chairman) presiding.

Members present: Representatives Upton, Burr, Bilbray, Bryant, Bliley (ex officio) and Stupak.

Staff present: Dwight Cates, majority investigator; Anthony Habib, clerk; and Edith Holleman, minority investigator.

Mr. UPTON. Good morning, everyone. We're going to get started. I know Chairman Bliley has a very busy schedule this morning, as we all do, but in deference to that, I'm going to let him make the opening statement first, and I will follow.

Chairman BLILEY. Thank you very much, Mr. Chairman. Thank you for holding this important hearing to review the Department of Energy's efforts at fixed-price contracting.

Throughout the 1990's, the Clinton-Gore administration initiated several important contract reform initiatives, including fixed-price contracting. Unfortunately, we are here to assess why another good reform effort has failed.

In October 1998, the subcommittee held a hearing to review the Department's fixed-price contract with BNFL to clean up radioactive waste at Hanford. At the hearing the subcommittee heard from BNFL's CEO Mr. Tom Crimmins, who made a series of important commitments regarding BNFL's future performance under this contract. Surprisingly on the same day of the hearing, just 2 hours after his testimony, Mr. Crimmins was informed by the BNFL board of directors that he should resign effective immediately. We later found out that the BNFL board voted to seek his resignation well before the hearing, but did not inform him until after his hearing testimony.

Given BNFL's conduct on the Hanford Project since that hearing, I am concerned that BNFL board allowed Mr. Crimmins to make what now seem to be empty commitments to the subcommittee.

Secretary Richardson recently stated that BNFL's recent proposal at Hanford was outrageously expensive and inadequate in many ways. What is more outrageous, however, is that DOE failed to monitor the company's performance or to determine that BNFL was off the mark from the very beginning. Clearly if DOE were

properly overseeing this contract, termination would have occurred much, much earlier.

I am concerned that many of the mistakes made by DOE and BNFL at Hanford may also be repeated on other fixed-price contracts at the Oak Ridge site, the Idaho site, and I'm also concerned that these troubled projects may signal the end of fixed-price contracting.

We expect the Department will select reliable contractors, negotiate sound contracts, and effectively manage major cleanup projects once they begin. The Department is ultimately and directly accountable for cost overruns or schedule delays whenever they occur. As a result of continued poor management and a lack of leadership from the Department, fixed-price contracting is experiencing serious problems. However, we cannot afford a return to the old cost plus gravy train contracting methods, but we also cannot afford to waste hundreds of millions of dollars and several years of poorly managed reform efforts. We need management consistency, meaningful contract reform, and a track record of cost control and successful cleanups at DOE sites.

I am interested in today's testimony, and I thank the Chairman for this hearing, and I thank him for deferring to me for this opening statement.

Mr. UPTON. Thank you, Mr. Chairman.

Welcome, everyone.

Approximately 80 percent of the Department of Energy's annual budget flows directly to its site contractors, which employ more than 100,000 personnel across the DOE complex. Historically, the Department has relied on cost plus contracts which provide full reimbursement for its contractors' incurred cost plus a profit regardless of the contractor's performance.

Cost-plus contracting seemed to work during the cold war when the government demanded the aggressive buildup of increasingly complex weapons systems. However, today the Department's largest budgetary responsibility is, in fact, environmental cleanup. Unfortunately, cleanup work under the Department's cost-plus contracts has resulted in a dismal and predictable record of cost overruns and schedule delays on several major cleanup projects. Many of the DOE's more costly mistakes, including the spiraling cost overruns at Hanford Spent Nuclear Fuel Project, have been well documented by this subcommittee in the past.

In an attempt to turn the tide on DOE's cost-plus contracting problems, in 1995, former Secretary O'Leary introduced fixed-price contracting as a central contract reform initiative. Fixed-price contracts were intended to shift more of the risks associated with technical cost and schedule performance to the contractor. Many fixed-price contracts require the contractor to privately finance the cleanup work, and the contractor is paid only after successfully cleaning up the waste.

Unfortunately, many of the Department's fixed-price contracts are experiencing the same problems experienced under cost-plus contracts. Today this subcommittee will review the Department's largest fixed-price contracts to assess why DOE has failed to control spiraling cost growth and contractor performance problems.

This hearing is not the subcommittee's first hearing on fixed-price contracting. In the June 1997 oversight hearing, the subcommittee revealed the terrible outcome of the Department's first fixed-price-cleanup contract, the famous Pit 9 disaster. Announced in 1995 with great fanfare by former Secretary O'Leary, the Pit 9 fixed-price contract with Lockheed Martin was supposed to cost a total of \$200 million to complete cleanup of radioactive waste stored in thousands of barrels buried underground at the Idaho site. Due to a dispute regarding technology in waste characterization issues, Lockheed Martin stopped work at Pit 9. Nothing got cleaned up. DOE terminated the contract, and today Lockheed Martin is suing DOE for \$271 million. A \$200 million fixed-price contract with Lockheed Martin resulted in zero cleanup and a \$271 million lawsuit against DOE.

The purpose of the subcommittee's Pit 9 hearing was to highlight the Department's management problems so that other fixed-price contracts would not fail. At the hearing Secretary Pena promised the Department had learned from Pit 9's mistakes, provided a list of valuable lessons DOE would apply to its portfolio of new fixed-price contracts, including a \$6.9 billion Hanford tank waste contract, \$1.2 billion advanced mixed waste contract at Idaho, and \$238 million Oak Ridge Metals Recycling Project. Unfortunately when Secretary Pena left the Department in 1998, he took these valuable secrets with him because each of these fixed-price contracts are still experiencing schedule delays, cost overruns, and performance problems.

The subcommittee held its second hearing on fixed-price contracting in October 1998 to review the Hanford tank waste contract. DOE's contractor, BNFL, originally proposed a total fixed price of \$6.9 billion in August 1998 and began a 2-year design phase that would have been completed this summer, and at the 1998 hearing the subcommittee raised serious questions about the technical and financial risks associated with this first-of-its-kind effort.

GAO called for DOE to closely oversee BNFL's work. The Department and BNFL assured the subcommittee then that all the bases were covered. However, just a few weeks ago, BNFL decided to revise its \$6.9 billion fixed price a little bit and double it to \$15.2 billion. BNFL's announcement shocked the Department. Secretary Richardson quickly decided not to proceed with BNFL. Unfortunately, DOE's oversight failed to anticipate these events and now the Department is scrambling to figure out how to proceed with the cleanup of Hanford's radioactive waste.

DOE is also having trouble with its fixed-price contract with BNFL at the Oak Ridge site as well as the Idaho site. At Oak Ridge, BNFL agreed in 1997 to a \$238 million contract to decontaminate and recycle metal from three buildings in the Oak Ridge complex. Last month DOE informed the committee that BNFL had formally requested an additional \$116 million for the contract. DOE also told us BNFL plans to submit a request for another \$54 million. Additionally, DOE may have to pay BNFL \$40 million to cover the cost of Secretary Richardson's decision to prevent BNFL from recycling contaminated nickel. In all, these cost increases

could nearly double the price of the original \$238 million contract, and that's nothing fixed about the price of the contract.

At the Idaho site, the \$1.2 billion advanced mixed waste contract is also headed toward some trouble. According to the GAO, the project is falling behind schedule due to difficulties associated with obtaining environmental permits which are the result of changes in the technical scope of the contract. The delayed environmental permits have delayed construction of the treatment facilities resulting in cost increases of at least \$44 million above the original contract price, and these costs continue to increase, particularly if additional schedule delays are experienced. Technical uncertainties remain regarding the significant portion of the waste, up to 22 percent of the waste, that raise additional questions about whether the project will meet future schedule and cost milestones.

Today we are looking for answers, continue to look for answers as to why the Department's fixed-price contracts have failed to control cleanup costs or improve contract performance. All indications are that the Department has again failed to follow through on yet another important contract reform effort. Taxpayers always deserve better from DOE and its contractors in this particular mess. I look forward to hearing from today's witnesses on how we can fix these fixed-price contracts.

I yield to the gentleman from the great State of Michigan Mr. Stupak.

Mr. STUPAK. Thank you, Mr. Chairman. For more than a decade, and particularly after the end of the cold war, this committee, the General Accounting Office, and others have been dissatisfied with the cost and progress of cleanup work at our nuclear weapons productionsites. There was a general consensus that the Department was not capable of managing these contracts in a cost-effective manner, and that it should turn them over to industry, which would compete for these contracts in the same manner they do in the private world.

One of the most recent and worst examples of what could happen under the old cost-plus system was the in Tank Precipitator Project at Savannah River. This project began in 1982 by the then prime contractor at the site. Problems with the technology that surfaced in 1983 were hidden. By 1992, there were warnings from the GAO, DOE red teams and others that the technology might not work, but the project went on and on through many administrations and many Secretaries as the contractors made continuous promises that the technology could be fixed, and DOE accepted them. Over \$500 million was spent on a technology that produced so much benzene that it could not be operated. The lack of a precipitator delayed a larger project. There was no congressional oversight because the site contract hid the costs in its operation budget.

Finally in 1999, GAO did a report for Mr. Dingell of this committee laying out the financial wasteland that this project had become. To his credit, Secretary Richardson, within days of learning of the report, removed the contractor.

I must point out that by 1991, before this administration came into office, Congress and the General Accounting Office and the Department were more than ready to try something else. Various private contractors said they could complete cleanups faster and

cheaper if they had more control. Pit 9, a small site in Idaho, was chosen as a pilot for using a fixed-price contract with all the risk on the contractor. The idea was no cleanup, no payment.

We all know what happened. The waste wasn't fully identified. The technology did not work the way it was supposed to, and the price skyrocketed to the point where the contractor begged for a cost-plus contract. When denied, the contractor stopped work and was declared in default by DOE. The contractor and DOE are in court trying to settle their disputes about who is going to pay for what. The cleanup has not occurred, but this was not Savannah River. At least DOE had not spent money for years on a project that did not work.

Projects that we will look at today each have a different story. Unlike Pit 9, these projects all have some level of success and forward movement. More importantly, taxpayer dollars have not been mindlessly spent for years on nonperforming contractors. When the cost estimates for the Hanford Tank Remediation Project came in, that was in April, at \$15.2 billion, double the goal price set by BNFL in 1998, Secretary Richardson again moved quickly to terminate the contract and establish an alternative approach to cleaning—alternative approach to contracting for cleanup. The contract itself established this off-ramp.

It appears that the design completed at this stage is acceptable, but the government is not willing to accept the large contingencies that BNFL built into its financial projections. At Oak Ridge, BNFL is requesting significant contract price adjustments at Oak Ridge. There is dispute over the recycling of radioactive materials, but the cleanup of the site is not in question. It appears, moreover, that BNFL will absorb the majority of these additional costs and not the government, particularly if this committee maintains its oversight. That is exactly what a good fixed-price contract that puts the risk on the contractor should achieve.

Another project, Mr. Chairman, the Advanced Mixed Waste Project in Idaho, is moving forward successfully at the design phase. Although State construction permits have not yet been received because of the contract provisions, DOE has spent very little money on this project to date while the contractor has spent over \$100 million. It is too early to tell if the long-term cleanup schedule in the budget will be met, but BNFL is not taking all the risk here. The contract contains a 5-year adjustment provision that will allow an increase in the price paid for treatment by DOE if BNFL's actual costs are greater than anticipated.

The question for us today, Mr. Chairman, is not whether these contracts have gone forward without a single bump in the road, but whether this approach to contracting will result in smaller government outlays and more successful cleanups over the long run. What adjustments in approach should be made? I look forward to hearing positive suggestions from all the parties present today, including those on the dais, but perhaps we will finally admit that there is no silver bullet when it comes to cleaning up a 50-year legacy of our nuclear weapons production.

With that, Mr. Chairman, I yield back the balance of my time.
Mr. UPTON. Mr. Bryant.

Mr. BRYANT. I thank the Chairman. I appreciate our panel of witnesses for coming. I know it's been a very difficult period of time for the Department of Energy recently, and not to make it too light, but I am pleased that the hard drives were recovered behind the Xerox machine. My only concern is I hope the scientists weren't trying to copy it. It's supposed to be a little bit of humor there. You all can loosen up a little bit.

I did want to, as I sat and listened to our full committee Chairman's statement, and our subcommittee chairman's statement, say that I couldn't agree more, and I want to adopt both of those gentlemen's statements as well as my friend from Michigan Mr. Stupak's statement. It just seems to me as I read through the materials yesterday in preparation for this hearing, this is one of those just terribly frustrating things that I heard about before I came to Washington. Things that you can turn on the TV and expect to see on 60 Minutes or Dateline or something like that, and it is—I know it has to be frustrating to you and to the contractors, but it's terribly frustrating to us in Congress who have to go back home and go in front of people at town meetings and explain to them why this happens. Because there will be a story about this, and probably at some point one of the networks will pick it up and make an example out of it, as they should.

I just cannot imagine this type of situation being allowed to exist in the private sector where all parties are in the private sector. I cannot accept that fact that more care is not taken in drawing up the specifications, the bid specifications, and letting the people bidding on that contract know precisely what you need, what you want. That way you avoid all these subsequent changes and things that are so expensive. And it just seems like if a better job was done on the bid specifications, and maybe that takes more work to decide what we want out of this and not end up with things like this \$40 million overrun because we can't allow BNFL to recycle this material in Oak Ridge.

The second phase, negotiations of this contract. If you have good bid specifications out there, know what you want to do, both sides understand that, they don't come in after the fact and say, well, we didn't understand that, or we couldn't see this or that and we underbid, but negotiate. Good negotiations, arm's-length, in terms of what's out there, whether it's a bid process or negotiations, I don't know. And then importantly, as all speakers will talk about today, clearly better oversight is needed to make sure these overrides don't occur.

I think in the past, particularly through the cost-plus contracts, again, you just have the opportunity to make all kinds of money there by running up the costs. We are trying to go to a better system. I think the fixed-price contract is the way to go, but the way it is being handled through this process I just described is not working either, and I think many people have grown in the government sector to rely upon the generosity of the government and knowing well if there is an overrun, they are going to pay for it. They have deep pockets.

Again, I have a difficult time imagining something like this happening in a truly private-sector situation where they know big government is not back there to stand behind whoever made the mis-

take in the process. We seem to be in here always whining and moaning and groaning about these kinds of things, but there's a reason we do it, and we just hope for better. And I would yield back my time.

Mr. UPTON. Thank you.

Mr. Burr.

Mr. BURR. Thank you, Mr. Chairman. I have a superb opening statement, but I would like to ask that it be entered into the record and just make some general comments.

Mr. UPTON. It has to be unanimous consent.

Mr. BURR. The gentleman would ask unanimous consent that his full opening statement be listed in the record.

Mr. Bryant raises a very important question. Is this really the movie Groundhog Day, and do we just go over and over and over? I know the Secretary is tired of us drilling him on the same thing, but the fact is that the tool that we used to gauge our success or our failure is the General Accounting Office and their assessment. If they are not the appropriate ones, then we need to determine who is, and we need to bring them in and serve as a referee and try to tell DOE, you've done a good job or a bad job, or, contractor, you've done a good job or a bad job.

But there's absolutely no substitute under a fixed-price contract for not being specific in the contract for what it is you want done, and it seems like every fixed-price contract that this committee has looked at allows tremendous opportunities for the unknown, and for the unknown to be later billed for, and for DOE to at that time make an assessment as to whether they want it done or don't want it done. That's not fixed price. That's not clearly defined.

And I think the GAO made a very valid statement in their testimony, and that is, we're applying fixed-price contracts to things that you can't do it on, because if you don't know what needs to be cleaned up, how in the world can you ask somebody to bid with accuracy. And in the absence of being able to do that and to bid with accuracy, we say, there's a fudge factor over here, and then we are amazed when new numbers begin to come in.

If, in fact, the Secretary was shocked, surprised, angered, whatever the description is, that Hanford moved from a \$6.9 billion to a \$15 billion cost—I'd like to have the line manager from DOE who is over that site come in and tell me he didn't know that it was going to increase. I believe he would probably tell us in all honesty he knew it. I don't believe it was a surprise to the Secretary. If it was, somebody ought to be fired.

But the fact is we're not performing in a fashion that the taxpayers deserve. We understand this is very, very difficult work. We have a very small pool of people we can turn to for the type of cleanup that we're asking the DOE to undertake. But I would stress on you, Mr. Secretary, today, and to the entire Department, the GAO has been very specific every time they've come to us, and they've said, we can't tell you for sure something can or can't be done, but we can make you this assurance: Without proper oversight anything can fail. And I would tell you that as you look at the experiences with the majority of the cleanups we looked at, we can't judge whether they could have succeeded or they were doomed to fail, but we can tell you that oversight doesn't exist be-

cause with oversight there are not surprises, and this committee responds to the surprises that you expressed that happened from your contractors and from fixed-price contracts.

I'm hopeful that if this is the movie Groundhog Day, that we'll bury this one and we won't revisit it again.

With that, I yield back, Mr. Chairman.

Mr. UPTON. Thank you.

Mr. Bilbray.

Mr. BILBRAY. Thank you, Mr. Chairman.

Let me clarify. I haven't seen Groundhog Day. If it doesn't show on United Airlines between San Diego and Washington, I don't see it. But I—let me just say to my colleagues, and I know you get tired of hearing the years of administration experience that this one member keeps harping about, but I think we need to be sensitive to the fact that as we see these horrendous problems, we don't just focus on the agency or the bureaucracy that administers it, but also of the universe in which they operate in.

First of all, let's admit it: When government funds are being spent, inherently there's a lack of accountability because it's nobody's money. It's everybody's money. I know that may sound absurd until you try to administer public funds, and people just don't seem to get that hot and heavy about the fact that there was a few dollars lost here, a few million here. After a while it starts adding up to a few dollars. But that happens in cities, counties, and Federal agencies. I know there are some people here would be outraged at me making that statement, but 25 years in government, you just don't have the sensitivity of one person saying, this is my money that you've blown.

I guess that's our job sitting here. We represent the people whose money is being not utilized to its maximum extent.

On the other side, especially when we're talking about environmental issues, and I want my colleagues on both sides to really hear this, there tends to be a mentality that money should not be a major factor with a lot of people who work on environmental issues. As if—it's almost sacrilegious to talk about—worrying about how much money it costs for a cleanup or for doing a certain strategy because it's wrapped in this environmental blanket, and thus make it is sacred and holy, and it's as bad as trying to look at how much somebody is giving or not giving at the collection plate at church.

I think we've got to watch out, that there are people out there that I call environmental Jimmy Swaggerts that wrap themselves in a green blanket and say, give me more money because the Lord above says this is what is needed, and you are not going to care about the environment if you don't give me all the money I want on this issue. Then you've got the agency that is sitting there saying is it cost-effective with constant pressure to do overkill. You never see an agency being attacked by, quote/unquote, oversight groups for doing too much cleanup, for—you never see them from that side of saying, why did they spend more money on this?

That's our job is to go the other way, but you've got huge pressure from the other side, from a bureaucracy's point of view, that you catch hell for not spending enough money and not doing enough and everybody saying you should have covered every base

even if it would have cost \$30 million more. And I've been guilty of that, too, I admit it.

So I just ask that we take a look at this. When we talk about cost-effectiveness, if we talk about common-sense approaches to cleanup and environmental strategies like this, that it's not just an abstract word. When you look the common sense, when you lose the sensitivity to the bottom line, when you lose the fact that we have a trust to use the public's funds to its best use, then that is part of protecting the public from environmental problems. That's part of cleanup using every dollar effectively.

I think that we need to say that maybe there needs to be some mindset changes that are outside the agency that is administering this fund. I think all of us are influencing this mindset, but at the same time that doesn't give an excuse for those who are being paid higher and administered for the good of the agencies.

So I would close by saying, Mr. Chairman, this is not just a thing of dollars and cents. For every dollar that's wasted on one of these contracts, that's a dollar that could have been used somewhere else to clean up the environment. I think we've got to remember that again and again, and those of us who want to claim to be environmentalists have got to be as serious about the waste and environmental cleanup as we are of the lack of environmental cleanup, because they both equate to the same thing in the long run.

I yield back, Mr. Chairman.

I would ask unanimous consent that all members that have opening statements, particularly those that are not here, will have a chance to enter that into the record, and without objection, that will be the case.

[Additional statement submitted for the record follows:]

PREPARED STATEMENT OF HON. RON KLING, A REPRESENTATIVE IN CONGRESS FROM
THE STATE OF PENNSYLVANIA

Mr. Chairman, thank you for holding this hearing. In August of 1997—over the protest of the minority—this Committee signed off on a reprogramming request to allow the Department of Energy to sign the *sole-source* contract with British Nuclear Fuels, Ltd. (BNFL) to clean up the gaseous diffusion plant at Oak Ridge that we are going to discuss today. It was a fixed-price contract, but not a competitively bid contract. Staff was told at the time that the Committee's decision to go forward was made because of political influence. We asked the Committee to look at this project in 1997, and we are pleased to see that our request has finally been granted.

The contract has been a disaster. It was a sole source contract with a questionable procurement history that has never been satisfactorily explained. Its unusual financial structure was completely dependent upon the release of a continuous stream of volumetrically contaminated radioactive metal into *national and global* commerce through a *non-public* permitting process in the State of Tennessee. Thousands of tons of metal were involved. Despite all of its public statements that this metal would be very clean, DOE's contract has absolutely no clean-up standards in it. Despite all of DOE's representations to Congressional staff that, in England, BNFL had previously cleaned up and recycled volumetrically contaminated nickel in follow-up interviews with staff, DOE and BNFL both admitted that they had not done so. That metal sits in a building in England. The technology then selected to clean the nickel at Oak Ridge had never been used commercially.

Moreover, notwithstanding statements from DOE and BNFL at that time that the recycled nickel will be used only in motorcycle batteries sold in Europe and Asia, there was no requirement that this be done. The expected battery factory with 500 'ohs in Oak Ridge disappeared almost as soon as the contract was signed.

Mr. Chairman, it is well known that the American public has a visceral negative reaction to having radiation deliberately inserted in its products. The Nuclear Regulatory Commission has no standard for the free release of radioactively contaminated materials. This contract represented the first time that the Department of En-

ergy had transferred knowingly contaminated materials to a contractor before cleaning it up to what are known as ALARA—or “as low as reasonably possible” standards. It violated DOE’s own order for releasing volumetrically contaminated materials. And because the license for release was granted by the State of Tennessee, it was done secretly without notice to or input from either the scrap metal dealers and the steel industry which would process this material or the public which would use it. No one can track free released metal once it is put into commerce. Would it be in our silverware, our batteries, our teeth, our buckles, our soda cans? If this metal resulted in the contamination of even one steel mill, tens of millions of dollars in cost would be shifted to an unsuspecting party.

We have come a long way since that time. After many meetings with the steel industry, labor unions, environmental groups and others, Secretary Richardson has halted the recycling of radioactive metal from the DOE complex contemplated in this contract and is looking at ways to use it within the complex. He set up a task force to review the Department’s policies concerning the release of all radioactively contaminated materials, not just metal. I must thank him for the personal attention and the departmental resources that he has given to this issue.

Recently, I introduced H.R. 4566, the Steel and Metals Consumers Radioactivity Protection Act, or the SCRAP Act, to protect steelworkers and the American public from excessive radioactivity in the products they make and use. The bill provides that scrap metal will not be recycled until a standard is set—through an open and public process—to control the release of radioactively contaminated scrap across state and international boundaries.

But we also have more routine problems in the Oak Ridge contract. There are cost overruns and the usual disputes over who knew what when the contract was signed. BNFL wants significant cost adjustments that would add 50 percent or more to the final price. As Lockheed Martin learned at Pit 9, it is extremely difficult for a contractor to successfully complete a fixed-price contract for cleaning up DOE’s radioactive waste. The technological and other unknowns are too large. These projects are never as they appear to be.

The question we must answer today is whether the problems would have been even worse under the traditional cost-plus contract. We cannot answer that question, although my inclination is to believe that the costs would have been even greater under the old system. Perhaps we in Congress must face the reality that these projects are much more complex, much more risky and much less certain than almost any other clean-up projects we have undertaken. They are not the same as building an office structure. Perhaps these contracts should be broken down into parts that can be accomplished with a fixed-price contract and those that cannot. I look forward to a further discussion on these matters.

Mr. UPTON. Our first two witnesses today include the Honorable T.J. Glauthier, Deputy Secretary of the Department of Energy; Ms. Gary Jones, Associate Director, Energy Resources and Sciences Issues, from the U.S. General Accounting Office. Welcome. You both have been before us before. You know our subcommittee rules, and it has been a long-standing tradition to take testimony under oath. Do either of you have objection to that? And if you would also perhaps identify the folks that are next to you.

Ms. JONES. I have with me William Swick, who is an Assistant Director with GAO, and who is responsible for the direct work on the three projects that we’re talking about today.

Mr. GLAUTHIER. I have with me Carolyn Huntoon, who is the Assistant Secretary for Environmental Management at the Department of Energy.

Mr. UPTON. Thank you. Committee rules also allow you to be represented by counsel if you wish that. I didn’t think so.

If you’d stand and raise your right hand.

[Witnesses sworn.]

Mr. UPTON. You are now under oath. I would just like to note that we’ll have a number of members, I’m sure, come and go during this hearing, and I know for myself I have a couple of amendments on the floor with my name on them that I’m going to be needing to participate on the House floor. So your statements are made in

their entirety as part of the record, and at this time we'd like you to take some time, up to 5 minutes or so, to summarize that.

Mr. Glauthier, we'll start with you. Welcome.

TESTIMONY OF T.J. GLAUTHIER, DEPUTY SECRETARY, ACCOMPANIED BY CAROLYN HUNTOON, ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT, U.S. DEPARTMENT OF ENERGY; AND GARY L. JONES, ASSOCIATE DIRECTOR, ENERGY, RESOURCES, AND SCIENCES ISSUES, ACCOMPANIED BY WILLIAM SWICK, ASSISTANT DIRECTOR, U.S. GENERAL ACCOUNTING OFFICE

Mr. GLAUTHIER. Thank you very much, Mr. Chairman and members. I was struck by the opening comments of Mr. Bryant and Mr. Burr. I have seen the Groundhog Day film and lately have felt that that's what we're in with the security hearings that we've been talking about. It is good we found the disks, and hopefully we'll have more answers very shortly. It is nice to come before you today and talk about a different subject.

Actually, listening to the opening comments, it seems that we have a lot of agreement on these issues. This is not a partisan issue, nor does it divide the Congress or the administration. It is an issue that we all care about: the response management of these programs and finding the best contracting forms, the best management forms for all of the work that we are doing. So, I appreciate you holding the hearing and having us here today.

As I mentioned, I have Carolyn Huntoon, our Assistant Secretary with me, as well, to make sure that you have as much information as you can on these topics.

Let me make a few remarks, and, as you indicated, the full testimony is in the record.

I'd like to put these issues in perspective, if I may. The Department's environmental management program, as you've noted, is responsible for managing the enormous legacy of radioactive and hazardous contamination left over from 50 years of nuclear weapons production and research. We're responsible for storing, treating, and disposing of large volumes of liquid and solid nuclear wastes, safeguarding materials that can be used to make nuclear weapons treating and storing corroding nuclear spent nuclear fuel, and remediating extensive surface and groundwater contamination.

Our Environmental Management Program manages about 30 percent of all the Department's fixed-price contracts; that is, 37 of the 132 fixed-price contracts in the Department, that are each over a half million dollars, and then, of course, many more subcontracts. The value is about \$1.5 billion worth of fixed-price contracts in the Environmental Management Program. And we'll focus especially on 4 of these 37 in my comments today.

The administration has made significant progress in cleaning up the legacy of waste. We've actually completed cleanup at 69 of 113 sites in the program. We've opened the Waste Isolation Pilot Project in New Mexico for the disposal of transuranic waste and have completed 59 shipments to the WIPP. At Hanford, we've removed the highly radioactive liquids from 121 of the 149 old single-shell tanks, and we're on schedule for this fall to begin moving corroded spent nuclear fuel from wet storage near the Columbia River

to safer dry storage farther away from the river, the K-Basins Project.

Since 1996, at the Savannah River site, we've been operating the Nation's first vitrification facility for defense high-level liquid waste. By the end of this year, we'll have produced over 900 canisters of waste solidified in glass. At Idaho, we began transferring Three Mile Island spent nuclear fuel from wet storage into a new dry storage facility. Last year, overall, throughout the complex, we deployed over 120 new technologies developed over the years through the Environmental Management Program.

This administration inherited a contracting method that was developed during the Manhattan Project and institutionalized during the cold war. Under the old management and operating, or M&O contracts, the Department reimbursed the contractors for all costs and assumed all risks. There was no competition for most of these contracts. Only a few private sector firms participated.

This administration has taken the initiative, consistent with GAO's recommendations in the early 1990's, to reform the Department's old contracting and management practices. The increased use of fixed-price contracts is only one of a number of improvements that we have made in recent years. In the last 6 years, we've increased the number of competitively awarded contracts for the management and operation of our major facilities by nearly an order of magnitude, as compared with the Department's record during the previous years. We've recruited contractors with environmental expertise rather than continue to rely on the traditional nuclear weapons production firms. Performance-based contracting as opposed to the previous practice of pay for effort has become the standard.

Last year Secretary Richardson also strengthened project management by simplifying and clarifying the responsibility and accountability of line management for performance, by creating the Office of Engineering and Construction Management to establish baseline cost control processes and quarterly project reviews, by conducting independent external reviews, and by establishing the Deputy Secretary's Watch List for critical or troubled projects. More recently, the Secretary has taken additional actions to strengthen the Department's ability to sanction poor contractor performance and to reward outstanding performance, including allowing the Secretary to direct a contractor to remove its top manager for failure to perform.

As the GAO has reported, the Department has successfully managed a number of our fixed-price contracts. For example, at the Hanford site, Bechtel Hanford alone has awarded 16 major fixed-price contracts for projects, including the construction and operation of the environmental restoration disposal facility for the safe long-term storage of the C reactor and for the deactivation of the N reactor. At the Savannah River site, the Department estimates it avoided over \$25 million in costs as a result of utilizing fixed-price contracting for the M Area Mixed Waste Tank Remediation Project. And, another example at Oak Ridge, the Department may avoid up to \$45 million in costs through the use of a fixed-price contracting approach for the construction and operation of the Environmental Management Waste Management Facility.

Of course, not all the projects for which we have awarded fixed-price contracts have met our objectives. In making the necessary changes, we've worked hard to act on the observations and findings of independent reviewers, including the National Academy of Sciences and the GAO. I'd like briefly to review our experience with some projects, namely, the four key projects referenced by the GAO in the subcommittee.

First is the Pit 9 Project that you mentioned. In 1991, the Department conceived of this project as a pilot to change the way the Department acquired environmental services. The underlying objective was to shift the risk of performance away from the government, as under the traditional M&O approach, to the contractor who controlled the elements of the project necessary to get the job done. Pit 9 cleanup called for contractor-owned facilities and equipment, a fixed price for completed work, and a guarantee of performance. A number of companies, including the ultimate contractor, Lockheed Corporation, argued that existing technologies could be applied to remediate Pit 9 on a fixed-price basis without any further research and development. The proposed project also would demonstrate characterization, removal, and treatment technologies.

Ultimately the contractor selected, Lockheed Martin Advanced Environmental Systems, failed to perform the contract under its terms and conditions and, as noted, has made claims against the Department through litigation for more than the amount of the original contract.

The Department believes the fundamental difficulties encountered by the contractor resulted from the company's failure to apply sufficient technical and management skills to the project and from its own management, business, and technical decisions rather than from the Department's actions. Had this been set up as a cost-reimbursable contract, the government would have paid millions of dollars for Lockheed Martin's unsuccessful efforts rather than the corporation bearing the financial responsibility as it does now.

Another case is the Hanford Project privatization, the Task Waste Remediation System, which has recently been renamed the River Protection Project. It's one of the largest environmental cleanup projects in the world. Approximately 54 million gallons of highly radioactive waste have been stored in 177 underground storage tanks, many of which are single-shelled and known to have leaked radioactive waste into the soil. The Department entered into an enforceable agreement with the State of Washington and with the EPA which includes requirements to remove the waste from the tanks, immobilize those wastes through the process of vitrification, and dispose of them. This contract was initially structured to provide strong financial incentives to achieve project schedule and performance goals and to provide project finance.

Applying a lesson from the Pit 9 experience, and with the support of the Congress, the Department set up the project with interim phases and milestones to enable course corrections based on new information as the complex project evolved. Additionally, the Department established a number of project controls, including a variety of internal and external reviews.

After BNFL's successful performance on the first phase of the contract in 1998, DOE authorized them to proceed with a 24-month

extended design period for a facility to treat the tank waste. At that time BNFL represented that it could produce, with 90 percent confidence, a project whose costs would not exceed \$6.9 billion and was willing to stake \$300- to \$500 million of their own equity on the outcome. However, in April of this year, the company produced a formal bid of \$15.3 billion. This bid was unacceptable from a financial, managerial, and cost perspective, a decision supported by our independent cost estimate.

I might add, we thought as recently as February of this year that the costs were still going to come in close to the original number. Those were the reports that we were given from the company. Mr. Burr indicated someone should be fired, and someone has been. The contractor has been fired from this project. We're not going ahead with that contractor.

Some cited the cost increases in the BNFL proposal as evidence of our managerial deficiencies regarding complex projects. We strongly disagree. BNFL first informed the Department of significant cost increases of the project at an informal briefing in early April, just 3 weeks before their formal bid was delivered. At no time prior to this briefing did we have any indication that the cost would escalate by anything close to this magnitude. At that briefing, the Department requested that BNFL identify options for reducing its costs when submitting its formal bid. The company, however, did not do so.

Fundamentally, the Department was unable to enter into a privatization contract for the next phase of this project, because the contractor was unwilling to assume the financial risks originally envisioned by both parties. This unwillingness to assume risk was translated into increased costs and excessive conservatism in the contractor's proposal. We've been forced to restructure the project in order to meet our agreements with the State and to have a realistic overall cost. In part because the design was only 13 percent complete instead of the target level of 30 percent, we're not even able to seek fixed-price bids. We are seeking a strong competition and intend to select a new design construction firm by January 1.

Mr. UPTON. Mr. Glauthier, if I could just stop you there. We've gone a little bit beyond the 5 minutes, as you know. We also have a vote on. I think we'll have to stop temporarily, and we'll come back in about 10 or 15 minutes. Thank you. Recess.

[Brief recess.]

Mr. UPTON. We're okay from votes for at least an hour they say.

Mr. Glauthier, if you could briefly wrap up, and then we'll go to Ms. Jones.

Mr. GLAUTHIER. Thank you. I appreciate it. I will do this quickly and wrap it up and turn it over to your other witness.

I would like to comment briefly on the fixed-price contract at Oak Ridge, the one that was signed in 1997 with BNFL to decommission three buildings and to recycle or dispose of the materials within them and to make them available for commercial reuse. Considerable progress has been made on this project. The cleanup is actually now over 22 percent complete. Nearly 16 million pounds of material have been dismantled, and much of the waste has been disposed. However, it's not been pain-free and, as was noted earlier,

the contractor has submitted a number of requests for equitable adjustments, adding up to a significant amount of extra money.

We share the subcommittee's concern that this raises a red flag, calling for very close attention. We're concerned that contractor's management or control or change control systems were not well run. We believe that very few of the costs in these requests are justified and, ultimately, very little of it will finally be approved.

Going forward, we're urging the contractor to improve the management system and we believe that that is happening. The current estimate to complete that project is about 5 percent higher than when the contract was awarded in 1997, although we may have to increase that as a result of specific policy changes we've made recently on recycled material. I'd be happy to discuss that more in the question period.

I will not comment on the Advanced Mixed Waste Treatment Project at Idaho, but we'd be happy to discuss that in the question period. I will note, though, that our current estimate to complete that project is within 2 percent of the original contractor award in 1996.

And then finally, I would like to present the lessons learned out of these experiences. Our feeling is that many of the lessons learned are very similar to the lessons or principles in the GAO reports over the years and in the comments that the committee has offered earlier. For one thing we agree that fixed-price contracts are not appropriate for all situations. Many factors, including the waste characteristics, the complexity of the project, the number of contractors willing to compete, the financing mechanisms available, the optimum allocations of risk, must be considered in determining the appropriate type of contract.

Having said all that, we do also believe that fixed-price contracts are appropriate in a number of cases if we can define those characteristics well enough and we can get real competition, we can use fixed-price contracts effectively for faster program completion and better cost to the government. Thank you, Mr. Chairman. I'd be happy to answer questions.

[The prepared statement of T.J. Glauthier follows:]

PREPARED STATEMENT OF T.J. GLAUTHIER, DEPUTY SECRETARY, U.S. DEPARTMENT OF ENERGY

Mr. Chairman and members of the Subcommittee, I appreciate the opportunity to testify about the Department of Energy's (DOE) experience with fixed-price contracting for environmental management projects. In recent years both the Department and the Subcommittee have recognized the need for the Department to strengthen its project management capabilities, to reform its contracting practices, and to better integrate the two.

Under this Administration, the Department has incorporated many state-of-the-art private sector contracting and project management practices and principles into all of our operations. For example, in the last six years we increased the number of competitively-awarded contracts for the management and operation of our major facilities by nearly an order of magnitude, as compared to the number that had taken place in the previous ten years. This year alone, the Department is competing seven management and operating contracts, more than double the number of contracts competitively awarded between 1984 and 1994. Performance-based contracting, as opposed to the previous practice of pay-for-effort, has become the standard. The Department now routinely uses external independent reviews for major projects. In addition, we created an office within the Department to be the focal point for improving our project management practices for all DOE programs. More-

over, the Office of Environmental Management has created its own Office of Project Management to aid its field offices in the management of major projects.

We recognize that there is still much work to be done—changes in old practices and work cultures take time to be fully implemented. We also recognize that not every attempt at fixed price contracting has met our objectives. However, we believe that we have applied the lessons learned from those situations to improve our contracting practices.

Environmental Legacy of the Cold War

Understanding the contracting issues we face requires an understanding of the context for our contracting. The Environmental Management (EM) program is responsible for managing and cleaning up the environmental legacy of the nation's nuclear weapons production program and government-sponsored nuclear energy research. The scope and challenge of this task is enormous, involving managing large volumes of nuclear wastes, safeguarding materials that could be used in nuclear weapons, and remediating extensive surface and groundwater contamination. For example, the EM program is responsible for:

- remediating 1.7 trillion gallons of contaminated ground water, an amount equal to approximately four times the daily U.S. water consumption;
 - remediating 40 million cubic meters of contaminated soil and debris, enough to fill approximately 17 professional sports stadiums;
 - safely storing and guarding more than 18 metric tons of weapons-usable plutonium, enough for thousands of nuclear weapons;
 - managing over 2,000 tons of intensely radioactive spent nuclear fuel, some of which is corroding;
 - storing, treating, and disposing of radioactive and hazardous waste, including over 160,000 cubic meters that are currently in storage and over 100 million gallons of liquid, high-level radioactive waste;
 - deactivating and/or decommissioning about 4,000 facilities that are no longer needed to support active DOE missions;
 - implementing critical nuclear non-proliferation programs for accepting and safely managing spent nuclear fuel from foreign research reactors that contain weapons-usable highly enriched uranium; and
 - providing long-term care and monitoring—or stewardship—for potentially hundreds of years at an estimated 109 sites following clean up.
- Despite the complexity and size of its mission, EM has made substantial progress:
- Active cleanup is complete at 69 of 113 sites as of the start of fiscal year (FY) 2000.
 - The Waste Isolation Pilot Plant (WIPP) is open and disposing transuranic waste. To date, WIPP has received 59 shipments of transuranic (TRU) waste from Los Alamos National Laboratory, Rocky Flats, and Idaho National Engineering and Environmental Laboratory (INEEL), with the Hanford and Savannah River sites expected to begin shipping this year.
 - In FY 1999 alone, we disposed of 49,000 cubic meters of low-level waste, 14,000 cubic meters of mixed low level waste, and 282 cubic meters of transuranic waste at disposal facilities at DOE sites and at commercial disposal facilities.
 - Cleanup of all 22 large uranium mill tailings sites is complete, as well as 5,300 “vicinity properties,” including elementary schools and homes.
 - At Rocky Flats, we continue to make great strides towards meeting our 2006 closure goal, including removing all plutonium pits from the site, beginning shipments of highly-enriched uranium to other sites, and demolishing a major plutonium research facility.
 - At the Idaho National Engineering and Environmental Laboratory, we completed the new dry storage facility for spent nuclear fuel and began transferring Three Mile Island spent nuclear fuel from wet storage to the safer new facility.
 - In support of non-proliferation goals, we have now completed a total of 14 shipments of spent nuclear fuel from foreign research reactors from 23 countries since the beginning of the Foreign Research Reactor (FRR) Spent Nuclear Fuel (SNF) Acceptance Program in 1996—two joint combination shipments from South America and Europe, seven shipments from Europe, one from South America, one overland truck shipment from Canada, one shipment from Australia, and two shipments from Asia.
 - At the Hanford Site, we restarted plutonium stabilization activities to reduce the risks posed by unstabilized plutonium materials; we have resolved three of the four high-priority safety issues for the high-level waste tanks, such as the generation of high heat in one tank and a rise in the surface level in another; and we have removed liquids from 120 of the 149 old, single-shell tanks.

- At the Savannah River Site, we are successfully operating the nation's first defense high-level waste vitrification facility for stabilizing over 34 million gallons of liquid wastes stored in underground tanks. By the end of FY 2000, we expect to have produced over 900 canisters of high-level waste "glass"—approximately 15% of the total number of cans estimated to be produced during vitrification operations.
- We continue to increase on-the-ground use of new innovative technologies. During FY 1999, DOE sites used innovative technologies 218 times in cleanup activities—129 of which were used for the first time at a site. Moreover, since the inception of the EM Science and Technology program, we have seen over 500 deployments of over 200 new cleanup technologies. The deployment of these technologies is yielding significant benefits to the cleanup of the DOE complex, including: more efficient removal of highly-radioactive tank waste; containing and treating subsurface contamination; enhancing in situ bioremediation of organic contaminants; treatment of mixed low-level waste; and better methods to deactivate, decontaminate and dismantle facilities while ensuring worker safety and minimizing risk to the surrounding environment.

Historical DOE Contracting Practices

The Department and its predecessor agencies have historically managed a sizeable number of wide-ranging and high-dollar-value contracts to conduct its nuclear weapons production and environmental cleanup missions. Presently, the Department manages 132 active, multi-year, fixed-price prime contracts each valued over \$500,000, for a total contract value of more than \$5.2 billion. Of these, the EM program manages 37 fixed-price contracts, valued at a total of nearly \$1.5 billion. In turn, our prime contractors manage a large number of fixed price subcontracts.

From the Manhattan Project during the Second World War through the Cold War, contracting practices of the Department and its predecessor agencies remained essentially unchanged. The management and operating ("M&O") contract in common use at Department of Energy sites was a non-competitive, cost-reimbursable arrangement in which the government paid virtually all contractor costs and relieved the contractor of all risk. During this period, M&O contracts were typically awarded or renewed on a five-year basis without any competition. The pool of private contractors with nuclear weapons production expertise was limited and operations were shrouded in secrecy.

Reviews by the General Accounting Office (GAO), the DOE Inspector General (IG), this Subcommittee as well as other Congressional Committees in the 1980s and the early 1990s identified numerous weaknesses in these historical contracting practices. For example, in testimony before this Subcommittee in 1993, GAO stated that "At the core of the DOE's problems is a contracting philosophy dating back to the Manhattan Project" in which "contractors operate largely without oversight or financial risk."

A major area of criticism related to the Department's practice of accomplishing all site work on a cost-reimbursable basis. This "cost-plus" approach provided little incentive to contractors to control costs or improve the quality of performance because the contractor's costs were routinely reimbursed—even if the contractor's performance was unacceptable and work had to be redone.

Additionally, after the Cold War ended, much of the Department's mission shifted from the production of nuclear weapons to management and cleanup of the nuclear wastes and materials that were left from the nuclear weapons production era. In many instances, the contractors that had historically operated the DOE sites did not possess the environmental expertise to clean-up this legacy of contamination. The old practice of renewing and awarding contracts without open competition was not suited to the changing missions and needs at the Department's sites.

Recent DOE Reforms

The Clinton Administration immediately recognized and responded to these contracting problems in 1993 by initiating comprehensive contract reform. The 1994 report, entitled *Making Contracting Work Better and Cost Less*, recommended a number of specific actions to make the Department's contracting practices more cost-effective. Among the key recommendations was to increase the use of fixed-price contracts at both the prime and subcontract levels, where appropriate. The report also recommended that work performed by non-competitively awarded M&O contractors be critically assessed to determine whether it could be more efficiently accomplished through competitively awarded contracts. Additionally, the report recommended that performance goals and indicators be developed for major site contracts to increase the use of performance-based contracts.

Since that report, the Department has worked diligently to implement these reforms. The Department has:

- significantly increased competition, recompeting, since 1994, 28 M&O contracts worth over \$40 billion. Indeed, over 94% of our new (non-M&O) contracts were competitively awarded in FY 1999 (up from 93% in FY 1998). This exceeds the total number of M&O competitions in the entire previous history of DOE and its predecessor agencies. Of the eleven major facility management contracts for the Environmental Management program, five of these (for the Idaho, Miamisburg, Oak Ridge, Richland, and Rocky Flats sites) were awarded to non-incumbents;
- spurred participation in DOE contracting by firms that had not generally participated in DOE procurements for traditional M&O contracts;
- brought in contractors with environmental expertise rather than relying on traditional nuclear weapons production contractors to perform cleanup and encouraged more contracting out by facility management contractor to apply niche expertise to defined projects;
- encouraged the use of fixed-price contracting, where appropriate, both at the prime contract level and at the subcontract level. For example, at Savannah River, from FY 1996 through FY 1999, an average of 97% of our total subcontracting commitments have been awarded as fixed-price contracts—amounting to a total dollar value in excess of \$1.25 billion. Similarly, during the same period at the Hanford site, 100% of the subcontracts awarded by the M&I contractor (Fluor Hanford, Inc.) and the Environmental Restoration Management Contractor, or ERM (Bechtel Hanford, Inc.), have been awarded on a fixed-price basis—for a total contract value of \$661 million;
- made performance-based contracting, rather than level of effort, the norm;
- instituted an innovative, performance-based “closure” contract at Rocky Flats; and
- worked to tailor the contracting mechanism to the job at hand.

To further improve contractor performance, last year Secretary Richardson strengthened project management by:

- simplifying and clarifying the responsibility and accountability of line management for program and project performance;
- creating the Office of Engineering and Construction Management in the Office of the Chief Financial Officer to improve project management throughout DOE, including establishing baseline change control processes, and quarterly project performance reviews;
- conducting external independent reviews by highly experienced project management professionals in the early planning stages of a project (with additional reviews as appropriate in later stages of design and construction), followed by the development and tracking of corrective action plans, if needed, in order to correct management, technical, or regulatory deficiencies prior to any significant cost and schedule impacts;
- establishing a Project Engineering and Design (PED) funding line and authorization to design projects for future years new starts, which will enable a more credible baseline, derived from 35 percent design, to be used for Line Item project approvals;
- making greater use of the National Academy of Sciences in reviewing projects; and
- establishing the Deputy Secretary’s “Watch List” of critical or troubled projects that will be subject to intense oversight at the highest levels within the Department until identified problems have been corrected.

This year, the Secretary has taken additional actions, including:

- requiring all major systems critical decisions, baseline change proposals, or site selections for all new missions to be approved by the Deputy Secretary before proceeding to the next acquisition phase; and
- strengthening the Department’s ability to sanction poor contractor performance and reward outstanding performance, including allowing the Secretary to direct a contractor to remove its top manager for failure to perform;

The Office of Environmental Management (EM), under Assistant Secretary Carolyn Hunttoon, has similarly improved program and project management, including establishing the Office of Project Management within EM. This new office supports our field offices in their project management efforts and assists Headquarters staff with their oversight of project implementation. Additionally, the office coordinates internal and external reviews of our projects and critical decisions for significant projects not reviewed by the Deputy Secretary.

Beginning in 1996, EM also began to apply privatization, an innovative extension of traditional fixed-price contracting. Under privatization, the contractor would fi-

nance the project and would not receive the contractually specified payments from the government until the projects or services were delivered according to the terms of the contract. EM viewed the concept as an important means of taking advantage both of market forces and private industry expertise to improve technical and schedule performance and reduce the costs of some of its major cleanup projects. Moreover, shifting substantial performance risk to the contractor provides greater incentives to the contractor to complete the mission on schedule and within cost. Also, privatization facilities could be initiated earlier through reliance on private financing. Finally, the Environmental Management program had reason to believe that cost and schedule efficiencies could be achieved because of its outsourcing experience between fiscal years 1992 and 1995, which showed substantial cost savings compared to the traditional M&O approach. The Congress supported this approach through authorizing legislation and the establishment of a separate appropriation account for privatization projects.

A key attribute and advantage of EM's privatization approach is that it requires full life cycle planning of a project up front. This is a distinct advantage over traditional M&O approaches which often plan consistent only with the budget windows, which too often has given rise to rework as the full scope of the project is realized and after potentially considerable expense has been incurred.

In accordance with the authorizing legislation for the Department, DOE has worked with the Congress in developing privatization projects. At present, Congress has authorized and appropriated funds for the Department to proceed with six privatization projects. These are the: Hanford Tank Waste Remediation System; Idaho Advanced Mixed Waste Treatment Project; Oak Ridge Transuranic Waste Treatment Project; Oak Ridge Environmental Management Waste Management Facility Project; Idaho Spent Nuclear Fuel Dry Storage Project; and Remote-Handled Transuranic Waste Transportation Project. (The Hanford TWRS privatization contract will be changed to a different contract type, as discussed later in this testimony. In addition, a Contact-Handled Transuranic Waste Transportation Project which was originally funded under the EM privatization account has been canceled by the Department as a privatization project, and is now being funded out of traditional operating funds.)

DOE Experience with Fixed-price Contracting

EM has implemented various forms of fixed-price contracting as a means of improving performance, sharing risk with the contractor, and reducing costs. The results have generally been good, but, as would be expected when dealing with new approaches and complex issues, not devoid of problems.

In its 1998 report, *Alternative Financing and Contracting Strategies for Cleanup Projects*, GAO found that the Department has had success with fixed-price contracting, noting that the Department is most successful when there is: a clearly defined work scope; a low probability of major changes to the work scope; sufficient price information and/or multiple contractors bidding to minimize the cost to the government while providing a fair profit to the contractor; and appropriate risk sharing between the parties.

As the GAO has reported, the Department has been successful in the implementation of numerous fixed-price contracts. For example,

- at the Hanford site, Bechtel Hanford, Inc. alone has awarded 16 major fixed-price subcontracts with a total dollar value of over \$104 million, for projects including the construction and operation of the Environmental Restoration Disposal Facility (ERDF); the safe long-term storage of the C-Reactor; and the deactivation of the N-Reactor;
- at the Savannah River Site, the Department estimates it avoided over \$25 million in costs (from an initial planned expenditure of approximately \$46 million through the M&O contractor) as a consequence of fixed-price contracting for the M-Area Mixed Waste Tank Remediation project; and
- at Oak Ridge, the Department may avoid up to \$45 million in costs (from an initial estimate of \$81 million) through the use of a fixed-price contracting approach for the construction and operation of the Environmental Management Waste Management Facility.

The Department also has corrected previously identified deficiencies. For example, in 1998, this Subcommittee reviewed the contract and management problems with the Department's Hanford Spent Nuclear Fuel Project. At the time of the Subcommittee's review, the project was over budget and behind schedule, in large part due to an innovative but high risk project management strategy to accelerate the project that intentionally included only minimal cost and schedule contingency. GAO has expressed doubt that we would be able to meet the November 2000 date for beginning to move the spent fuel into safer storage. Due to increased manage-

ment attention, placement on the Deputy Secretary's Watch List, strengthened project management by both DOE and the contractor, inclusion of realistic contingencies to deal with problems that might be encountered, and increased use of incentives, the project is on track with our revised baseline to begin moving the spent fuel from the Hanford K-Basin into safer dry storage beginning in November of this year. A fixed-price contract is being successfully used to procure multi-canister overpacks for the project. To date, four hundred overpacks have been delivered on budget and ahead of schedule.

Our new closure contract at Rocky Flats illustrates how strong project management and the appropriate use of contractual incentives can support the Department's efforts to accelerate cleanup and reduce costs. Prior to our effort to accelerate the closure of Rocky Flats, cleanup was estimated to cost over \$31 billion and take longer than 50 years. This Administration's accelerated closure goal is to close the site by 2006. The new performance-based contract includes performance incentives to motivate the contractor to complete cleanup of the site within budget and the target date of 2006. Specifically, the contract provides additional fee if the contractor delivers ahead of the 2006 completion date, and significantly reduces that fee if the date is not achieved. Although it is premature to declare this project a success, it is clear that the innovative contractual approach at Rocky Flats represents a cornerstone of our management strategy to complete cleanup by 2006.

Not all of the projects for which we have awarded fixed-price contracts have met our objectives. The Subcommittee and the General Accounting Office have focused on several of these projects. I would like to briefly review our experience with each of these projects, and describe the lessons we have learned. As we review these projects, it is important to distinguish between issues that are attributable to the particular contracting approach and those that are attributable to other factors.

Pit 9

Pit 9 is one acre of 88 total acres of buried waste at the Idaho National Engineering and Environmental Laboratory (INEEL). The Pit contains plutonium-contaminated transuranic waste from Rocky Flats and low-level waste from INEEL. Remediation of this buried TRU waste is a significant issue in Idaho because the waste is over one of the largest aquifers in the nation—the Snake River Plain Aquifer.

The Pit 9 project pre-dated this Administration's current contract reform and privatization initiative. In 1991, the department then conceived Pit 9 as a pilot for introducing fundamental changes in the way the Department acquired environmental services. The underlying objective of these changes was to shift the risk of successful contract performance to the contractor who controlled the elements necessary to get the job done—technology, facilities, equipment, and workforce. The Pit 9 cleanup project called for contractor-owned facilities and equipment, a fixed price for completed work, and a guarantee of performance. In undertaking the Pit 9 project, the Department was responding, in part, to comments from private industry and others that its traditional approach of relying on the M&O workforce for remediation on a "cost-plus" basis was inefficient and costly. A number of companies, including the contractor ultimately selected, argued that existing technologies could be applied to remediate Pit 9 on a fixed-price basis without any research and development. The Department viewed the Pit 9 project as a market test to determine the capabilities and desire of the private sector to join the Department in this new contracting approach. In addition, the Department stood to benefit greatly from successful use of the proposed melter system and treatment system. If used successfully, these technologies could have been used to solve many of the Department's mixed waste problems at other sites.

The project was also designed to demonstrate technologies for nuclear waste retrieval and treatment systems and stabilize Pit 9 contamination, as well as to develop characterization data that could be used in making the remediation decisions for other burial pits and trenches at INEEL.

The Pit 9 project was effected by the DOE management and operating contractor responsible for the management of INEEL through the award of a subcontract. Ultimately, the subcontractor failed to perform the subcontract under its terms and conditions. The prime contractor concluded that the performance difficulties encountered by the subcontractor resulted both from the subcontractor's failure to apply sufficient technical and management skills to the project and from its own management and technical decisions and terminated the subcontract for default. Had this been set up in the traditional manner as a cost-reimbursable contract, the government would have paid millions of dollars for the subcontractor's unsuccessful efforts. Notwithstanding the subcontractor's performance failure, it remains the Department's responsibility to complete the cleanup. Because of the default on the sub-

contract, the Department is now pursuing an alternate cleanup path using a different contracting method.

Although the Pit 9 subcontract did not achieve its ultimate objective, it did serve as a learning experience for the Department when it began to develop privatization and more traditional fixed-price contracts. Some of the key lessons learned include, among others:

- establishing interim milestones for early detection of non-performance;
- creating contractual off-ramps in the event that performance expectations are not met;
- minimizing project risks to avoid prematurely committing to technical solutions and/or fixed price mechanisms;
- improved waste characterization;
- strengthening independent cost analysis;
- enhancing DOE project management and oversight capability; and
- conducting project quarterly reviews.

These lessons have been applied to subsequent projects such as the Tank Waste Remediation System (TWRS) and the East Tennessee Technology Park Decommissioning, Decommissioning and Recycle Project (ETTP).

Hanford TWRS Privatization

The Tank Waste Remediation System (TWRS) privatization project, recently renamed the River Protection Project (RPP), is one of the largest environmental clean-up projects in the world. Approximately 54 million gallons of highly radioactive waste is stored in 177 underground storage tanks, many of which are known to have leaked radioactive waste into the soil. The Department has entered into an enforceable agreement (known as the Tri-Party Agreement) with the State of Washington and the Environmental Protection Agency which includes requirements for DOE to remove the waste from the tanks, then immobilize, through the process of vitrification, and dispose of it.

We recognize the technical, financial, and management challenges and risks inherent in the TWRS privatization project. From the beginning, our approach has been to provide strong incentives to achieve project schedule, cost, and performance goals and to minimize the total project cost to the American taxpayer. We have been working to establish a process that would lead to an appropriate contracting structure for the project that would:

- allocate risks to the party best able and motivated to manage them;
- reduce the life cycle costs compared to traditional contracting approaches;
- shift significant responsibility, accountability, and liability for cost and technical performance to the private contractor;
- obtain the best mix of private and public financing; and
- acquire products and services at a fixed price.

Our experience with Pit 9 taught the Department that, among other lessons, interim milestones are required for early detection and correction of non-performance or “course correction” based on new information. This lesson is reflected in the fact that the TWRS privatization contract was set up in phases. This lesson has stood us in good stead on this project. As we have gained experience at each phase of the project, we have adjusted the approach appropriately, each time protecting the taxpayers’ investment. Our experience with Phase I, Part A made it clear that: project risks needed better definition to attract third-party financing and to make the contractor willing to invest its own capital in the project; safety and financing considerations precluded building large pilot plants; and an equitable risk allocation between DOE and the contractors was needed.

Consequently, we modified our approach in 1998 to optimize the technical approach and reduce the likelihood of performance failure. Specifically, we:

- adopted a phased approach to Part B of the contract rather than commit prematurely to the entire project;
- authorized a 24-month period to complete up to 30 percent design to minimize risks associated with design uncertainties;
- changed to a full production facility that will allow for greater operational throughput and duration; and
- delayed the final price agreement to take advantage of improved design and financial information.

Additionally, the Department implemented a number of internal controls to better manage the project, including:

- creating an Executive Board of the most senior-level managers within the Department to review major project issues and recommendations and advise on the appropriate course of action;

- creating an independent Regulatory Unit which functions like an external regulator, to ensure adequate safety and health protection of workers and the public;
- conducting external independent reviews of the project's readiness to proceed at all levels (i.e., contractor, DOE Field, and DOE Headquarters) to support the pending authorization-to-proceed decision;
- conducting external independent reviews of BNFL's safety quality assurance and quality control at all DOE sites and at its Sellafield, U.K., facility, to ensure that problems experienced by the U.K. division of BNFL, Inc. have not carried over to their U.S. counterparts;
- hiring financial experts to review BNFL's financial approach;
- obtaining an Independent Cost Estimate for the project; and
- instituting rigorous quarterly performance assessments of all aspects of the contractor's performance—including cost, schedule, and technical approach.

In 1998, when DOE authorized BNFL to proceed with a 24-month design period for a facility to treat the Hanford Tank waste, BNFL represented that it could produce, with 90 percent confidence, a project whose cost would not exceed \$6.9 billion and was willing to stake \$300 to \$500 million of their own equity on the outcome. However, in February 2000, BNFL indicated that its cost estimate had grown to approximately \$8 billion, and, in early April, BNFL indicated that the price estimate had grown again—to approximately \$13 billion. On April 24 of this year, the company produced a formal bid of \$15.2 billion, which can not be supported based on our independent cost estimate. Additionally, the proposal provided only about 15% of the design for the facility. This bid was unacceptable from a financial, managerial and cost perspective, and we are moving aggressively to address the problem. We are now modifying our approach based on the lessons learned from all the preceding steps and are breaking the project into smaller, more discrete parts.

Fundamentally, the Department was unable to enter into a privatization contract for the next phase of this project because the contractor became unwilling to assume the significant financial risks originally envisioned by both parties. This unwillingness to assume risk was translated into increased costs and unnecessary conservatism in the contractor's proposal. This shift of risk onto the government was unacceptable to the Department, and so we will re-bid the project with a new contracting approach to seek a better deal for the taxpayer. Even with the new contract, we are committed to meeting the key Tri-Party Agreement milestones for plant operation.

Some cited the cost increases in the BNFL proposal as evidence of Departmental managerial deficiencies regarding complex projects. We strongly disagree. BNFL first informed the Department of the significant cost increases in the project at an informal briefing in early April, three weeks before the formal bid was delivered. At that briefing, the Department requested that BNFL identify options for reducing its costs when submitting its formal bid. BNFL, however, did not do so. In addition no time prior to this briefing did BNFL provide the Department with any indication that the costs would escalate by this magnitude.

It is important to note, however, that this 24-month period did advance the project. The design that the BNFL/Bechtel team produced is technically sound and is being carried forward. Perhaps the single biggest benefit of this period is that the full life-cycle of this project has now been systematically estimated, even if design is not yet complete. We have a sound technical approach. And we have pilot scale operational experience with the low-level and high-level waste melter that showed they worked better than anticipated.

We recognize that the Department still faces many challenges with a project of this complexity and magnitude and that those challenges must be managed. But this would be true no matter what contracting strategy we pursue.

With respect to the path forward for the River Protection Project, the Department has committed to two key targets at this time: (1) by August 15, 2000, DOE will release a Request for Proposal to design and construct a vitrification facility; and (2) by January 15, 2001, a new contractor will be selected. Vitrification operations are still scheduled to begin in December 2007. In terms of estimated project costs, prior to receipt of BNFL's proposal, the Department independently prepared a Government Fair Cost Estimate (GFCE) using design information from BNFL. The Department's estimate process was structured to ensure that both DOE and BNFL were estimating the same scope of work and technical solution, but shared no cost information. DOE's GFCE is approximately 30% less than the BNFL estimate for comparable work scope.

ETTP

Constructed as part of the Manhattan Project, the five massive uranium enrichment buildings at East Tennessee Technology Park (ETTP) in Oak Ridge, Ten-

nessee, are extensively contaminated with hazardous and radioactive substances. In August 1997, the Department entered into an innovative, fixed-price contract with BNFL to decommission three buildings, recycle or dispose of the materials within them, and make them available for commercial reuse. This approach was expected to avoid approximately \$500 million in additional costs anticipated by the government's cost estimate.

Conducting this project as a fixed-price contract was attractive to the Department for a number of reasons:

- the project cost was significantly below the previous estimates for the scope;
- the private contractor was responsible for financing much of the initial work;
- the fixed-price contract limited the Government's risk and uncertainty;
- the direct contract with the Department eliminated additional layers of contractor management and overhead costs; and
- as the largest decommissioning project that EM has undertaken, the contract served as a useful learning tool for the other massive "process" buildings that will require cleanup and dominate the D&D Fund appropriation, and ultimately drive the "critical path" for the ongoing Oak Ridge cleanup program.

Applying lessons learned from Pit 9 to this BNFL contract, the ETTP contract includes interim milestones to facilitate needed course corrections, and minimizes up front payments. Our Oak Ridge office is conducting regular project reviews and has strengthened the management capability for this contract by hiring additional construction managers to oversee activities in order to ensure that requirements are being met. In addition, DOE Oak Ridge has also contracted for additional legal support so that we can expeditiously review and address claims.

Considerable progress has been made on this project; but that progress has not always been without problems. The contractor represents that costs incurred by the contractor and estimated costs for completion are in excess of the contractor's bid price. The contractor has submitted a number of Requests for Equitable Adjustments (REAs) to the contract price based on its belief that the Government bears some responsibility for cost increases. To date the Department has recognized responsibility for extra costs associated with one REA, that is, costs associated with roof damage for the decontamination facility caused by an Act of God. Similarly, changes in Departmental policy, such as instituting a moratorium on the release of metals that formerly had been volumetrically-contaminated, could give rise to a valid REA. It is our joint expectation to have all the REAs submitted to date addressed by August 1, 2000.

The mere submission of an REA by a contractor does not mean that the Department is responsible for increased costs incurred. The Department is reviewing the remaining REAs and has no intention of granting them unless they are factually and legally supportable. As in the case of Pit 9, where the subcontractor attempted to recover the excess costs of its performance problems, this Department will not financially bail out fixed price contractors from risks that they have assumed under the contract.

Despite the contractor's request for contract price adjustment, a considerable amount of work has been completed by the contractor. For example:

- cleanup of the three-building decontamination and decommissioning project is over 22 percent complete;
- nearly 16 million pounds of clean material has been shipped to off-site scrap recyclers; and an additional 14 million pounds of metal was decontaminated prior to release (none of which was subject to the Secretary's moratorium on the release of formerly volumetrically-contaminated metals); and
- more than 10.5 million pounds of low-level waste and almost 23 million pounds of "mixed waste" pond sludge has been disposed of, mostly at off-site commercial facilities.

The Department is committed to completing this project in a manner that meets our expectations, is fair to the contractor, and effectively and efficiently utilizes the funds provided by Congress. BNFL is presently scheduled to complete the ETTP three-building project in March 2004, or six months longer than the original completion date of September 2003. The current estimated cost to complete the project is \$249.4 million (unescalated), which is approximately five percent higher than the value of \$237.8 million at the time of contract award. The project is being performed as a "CERCLA Non-Time Critical Removal Action" and thus has no regulatory milestones. The earliest critical project milestone (i.e., completion of dismantlement, removal of all material, and decontamination of 90% of Building K-33) is currently scheduled in the contract for June 2001; due to dismantlement and material processing delays, BNFL currently estimates that completion of this milestone cannot be achieved until July 2002. However, the contractor has changed management and

methodology for work execution in an effort complete the project within the original overall schedule.

Advanced Mixed Waste Treatment Project

The Subcommittee requested the General Accounting Office to examine the Advanced Mixed Waste Treatment Project (AMWTP), a fixed-price privatization project being undertaken at the Idaho National Engineering and Environmental Laboratory. The AMWTP would retrieve, sort, characterize, store, treat, certify, and load transuranic waste for transportation to off-site disposal. The project supports an enforceable agreement on mixed waste treatment and the 1995 Idaho Settlement Agreement requirement to ship the 65,000 cubic meters of waste to the Waste Isolation Pilot Plant, or other such facility designated by DOE, no later than December 31, 2018. In December 1996, DOE awarded a contract to BNFL to provide the required services to prepare 65,000 cubic meters of this TRU waste for disposal. Again, learning from the Pit 9 experience, the contract was developed with three phases. The first phase—environmental, safety and health permitting and preliminary design—is nearly complete.

The GAO has noted that the AMWTP is experiencing delays due to the delays in issuance of permits by the State of Idaho. GAO states that the schedule that the Department and the contractor adopted for the project anticipated that the necessary environmental permits would be issued in one year, whereas the State of Idaho predicted that two years would be necessary for the requisite permits to be issued.

We do not believe that this is evidence of poor project management. Certainly, had DOE adopted a permissive schedule the project might not be “behind”. The schedule which was adopted by DOE that included one year for permit issuance was chosen to ensure that the Department would be able to meet the milestones for the project set forth in enforceable agreements. The Department considered it reasonable to expect that the State of Idaho would work to issue permits to enable DOE to remain in compliance with those agreements. The delays in permit issuance are in large measure attributable to forces outside either the control of the Department or the State of Idaho—namely, the challenge to the incinerator portion of the project that emerged from citizens in Jackson, Wyoming.

Moreover, we do not agree that schedule delays mean that a fixed-price contract is inappropriate for this project. The issues regarding the appropriate schedule to set for attaining permits for this project would appear to be independent of the type of contract chosen.

Although external events beyond the control of the contractor have affected project schedules, the current estimated cost to complete the AMWTP is \$889.2 million, which is less than two percent higher than the contract award value of \$876.1 million. The lawsuit has been settled, and the State of Idaho has provided a schedule for issuing the permits in July 2000. Impacts of the permit delays and the incinerator re-evaluation on the project schedule and cost are being assessed. As a condition of the lawsuit settlement agreement, the Secretary decided to put the incinerator portion of the project on hold until a Blue Ribbon panel reviews alternative treatment technologies.

Contract performance continues to be satisfactory, as indicated by the contractor’s timely and high-quality technical work. With the settlement of the lawsuit over the incinerator portion of the AMWTP, and the expected issuance of the environmental permits in July 2000, facility construction should be able to proceed in August or September 2000. Despite the delays, DOE believes it is probable that BNFL Inc. will complete facility construction and begin processing waste in time to meet the Idaho Settlement Agreement milestones. Phase II facility design is 72% complete.

With respect to financing issues, BNFL may choose to self-finance through its corporate parent or obtain commercial financing, or may pursue some combination of self- and commercial financing, to fully implement the next phase of the project. To date the contractor has self-financed its activities.

Lessons Learned

In general, we agree with many of GAO’s observations. First, fixed-price contracts are not appropriate for all situations. Many factors, including the waste characteristics, the complexity of the project, the number of contractors willing to compete, the financing mechanisms available, the optimal allocation of risks, all must be considered in determining the appropriate type of contract for a particular scope of work.

Second, full private financing may not be viable. The Department has learned from the Hanford tank waste project that the initial concept of full private sector financing may impose too much risk upon the private contractor, which will then be reflected in a higher price for the government. We have learned that we need

to adopt a balanced approach, whereby the risks are appropriately shared between the contractor and the government. Just as the M&O approach, where the government assumed all of the risks, may be inappropriate, so too may be the approach where the contractor assumes all of the risks. In the future we will be looking for the optimal allocation of risks among the parties.

Third, we agree that effective project oversight is essential. Although we do not agree with certain statements that attribute each and every cost and schedule issue with our fixed-price contracts to Departmental managerial deficiencies, we agree that we can improve our project management abilities and this can help avoid similar issues in the future. We believe that over the past several years we have instituted a number of improvements in our management practices that will do just that.

Finally, we agree the complexity of the project should be considered when determining whether a fixed-price contract is appropriate. We agree that we have had more difficulty with complex projects than with the more straightforward projects. However, by definition, these projects present more technical, cost, and schedule complexity and can be expected to be more difficult to manage than less complex projects. A key lesson that we have learned from these complex projects, therefore, is that a more flexible, phased contracting approach may be the most appropriate, with continuing oversight and check points.

Although our contract and management reform efforts are beginning to bear fruit, we recognize that there is still room for improvement. We must continue to be vigilant managers, to continue to strengthen our project management and work to effect the necessary changes in the Department's culture that will make these kinds of contracting practices second nature to all employees. The Department spent 50 years building and living with one kind of contracting culture; it is unreasonable to expect that a culture so long in the making will be changed overnight.

Conclusion

The Secretary and I are committed to strengthening our management systems to ensure we can address contract and project problems as they arise. We have already demonstrated our willingness to take decisive action quickly when contracting problems arise. The Secretary's contract and management reforms to date lay a good foundation for strengthening the Department's contract management practices. But it is too soon to see the full impact of these changes. As GAO itself noted, "...problems are expected in the weapons complex, given the technical risks and complexities involved... Changing DOE's contract management approach will not come easy... Changing that culture, which has lead to so many problems, will take time and a significant commitment on the part of DOE's leadership." We have made that commitment and share your interest in continuing to consider new ideas for improving contractor performance. We look forward to working with you to make those changes.

Mr. UPTON. Ms. Jones.

TESTIMONY OF GARY L. JONES

Ms. JONES. Thank you. Good morning, Mr. Chairman. Thank you for the opportunity to be here to discuss DOE's privatization initiative.

DOE began considering aspects of privatization in the early 1990's and formalized this approach in 1995. The focus of my remarks this morning is on what DOE has accomplished with privatization of complex cleanup projects and our observations on the lessons that can be learned from these efforts.

We have reviewed three of DOE's privatization projects for this committee, the Pit 9, and Advanced Mixed Waste Projects in Idaho and the Tank Waste Project at Hanford. DOE's goals for privatization were straightforward. Reduce project cost, speed the cleanup, and improve contractor performance. On these projects DOE had little success in achieving estimated cost savings, although there is still a chance for the Mixed Waste Project in Idaho. All three projects have or will likely incur schedule delays, and DOE has not been satisfied with the performance of the contractors for two of the three projects we reviewed. So the simple answer is, although

DOE adopted privatization as a solution to its contracting difficulties, it has not been a successful alternative in all cases.

Let's talk about what lessons can be learned from these efforts. DOE's experience indicates that the two strategies that underpin the privatization initiative, fixed-price contracting and private financing, will not work effectively for all cleanup projects. Federal Acquisition Regulation Guidelines note that the conditions most conducive to fixed-price contracting include a well-defined scope of work, low probability of major changes to work scope, the existence of proven technologies, sufficient price information to determine a fair price, and appropriate allocation and sharing of risks.

In contrast, the three projects we reviewed had changes in scope, uncertainties about waste characteristics and technical approach, unrealistic project schedules or unresolved technical issues. Therefore these projects may not have been good candidates for fixed-price contracts.

With regard to the other component of privatization, private financing, it is not clear whether it's achievable for complex projects. None of DOE's privatized cleanup projects has secured commercial financing to date, although a few have been financed internally by the contractors. For example, on the Hanford Project BNFL planned to use both equity and debt financing. However, DOE agreed to pay BNFL for its commercial debt in the event of contract termination in order to make commercial financing more viable. DOE will terminate the contract before BNFL obtains commercial financing.

Another goal of private financing was to provide incentives for good contractor performance. However, DOE has not been satisfied with the performance of contractors on two of the projects we've reviewed because of concerns about their ability to successfully complete the projects. Sharing the risk by using different mixes of public and private financing as well as using incentive fee contracts could also help ensure that contractors will perform effectively.

A thorough analysis of financial alternatives is an important part of structuring a successful cleanup project. When DOE initiated each of the three projects we reviewed, it limited its analysis of contracting and financing alternatives to a comparison between a privatized approach and a cost reimbursement contract without performance incentives. In the past we have criticized such a narrow approach to making important contracting decisions.

Based on this committee's questions, DOE analyzed other financing options for the Hanford Project. However, we have some concern about DOE's analysis. DOE assumed that a privatized approach would have no cost growth because the contractor would have incentives to control costs. In contrast, the DOE assumed that other options would have cost growth that would more than offset the higher cost of private financing. However, DOE has no convincing evidence to support these assumptions. In fact, its experience contradicts them.

Also, DOE did not fully analyze the risk associated with assuming the responsibility for BNFL's debt in the event of contract termination. This decision has shifted significant performance risk from BNFL to DOE. A more complete evaluation of the actual risk

assumed by the government may have resulted in a different financing alternative being more cost-effective for the government.

In summary, Mr. Chairman, DOE cannot rely on privatization alone to fix contracting problems. It must look at privatization as just one of the many strategies that it can use to get the most out of the Federal cleanup dollars. In the future DOE must more carefully evaluate a complex matrix of factors, including how much of the waste has been characterized, the number of contractors willing to compete, financing options, and project risks and who is best prepared to assume them.

Because effective DOE management and oversight are critical to selecting the appropriate contract type and financing mechanism as well as to successfully implementing the contract, DOE needs to continue to improve its technical, financial, and managerial oversight capabilities.

Thank you, Mr. Chairman.

[The prepared statement of Gary L. Jones follows:]

PREPARED STATEMENT OF GARY L. JONES, ASSOCIATE DIRECTOR, ENERGY, RESOURCES, AND SCIENCE ISSUES, RESOURCES, COMMUNITY, AND ECONOMIC DEVELOPMENT DIVISION, GENERAL ACCOUNTING OFFICE

Mr. Chairman and Members of the Subcommittee: We are here today to discuss the Department of Energy's (DOE) privatization initiative as it has been applied to DOE's nuclear waste cleanup program. DOE oversees some of the most highly radioactive and polluted sites in the United States, primarily the consequence of over 50 years of producing nuclear materials for weapons. Cleaning up radioactively contaminated buildings, soil, and groundwater within the weapons complex and safely storing wastes is a major mission for DOE. The Department estimates that for the years 2000 through 2070, it will cost between about \$150 billion and \$195 billion (1999 dollars) to complete this mission and provide long-term monitoring of the remaining sites. DOE primarily contracts with private companies to accomplish the cleanup. In the past, this effort was generally performed under cost-reimbursement contracts by contractors that managed and operated many of DOE's facilities. DOE financed the operations, owned the facilities, and paid the contractors regardless of what was accomplished.

DOE started its privatization initiative in 1995 as a way to reduce the cost and speed the cleanup of its contaminated sites and to improve contractors' performance. The initiative was primarily an alternative contracting and financing strategy to foster open competition for fixed-price contracts; require the contractors to design, finance, build, own, and operate the facilities necessary to meet treatment requirements; and pay the contractors only for products or services delivered in accordance with the contracts. Since the initiative began, DOE has managed several of its complex and expensive cleanup activities as privatization projects.

Concerns have surfaced about whether DOE's privatization initiative has yielded significant results when applied to the Department's more complex cleanup projects. Our testimony discusses (1) what DOE has accomplished by privatizing such projects and (2) our observations on the lessons that can be learned from these efforts. It is based on our past reviews of DOE's privatization initiative, including reviews of three complex cleanup projects requested by this Committee—two at DOE's Idaho Falls Site and one at the Hanford Site in Washington State. Collectively, the estimated contract prices for these three projects were about \$8 billion. We have included a list of products at the end of this statement that we have issued on various aspects of DOE's privatization initiative.

In summary:

- For the complex cleanup projects we reviewed, DOE's privatization initiative has had little success in achieving cost savings, keeping the projects moving forward on schedule, or getting improvements in contractors' performance. For example, on the Hanford tank waste project, DOE estimated savings of from \$2.1 billion to \$3.5 billion by using the privatization approach. However, after dramatic growth in the project's estimated cost and concerns about the contractor's performance, DOE decided to terminate the contract. Similar problems on the Pit 9 project in Idaho led DOE to terminate that contract without achieving expected cost savings. Although DOE adopted privatization as a solution to its past contracting difficulties, recurring

cost, schedule, and performance problems demonstrate that privatization has not been a successful alternative for complex cleanup projects.

- Several lessons can be learned from DOE's privatization efforts. DOE cannot rely on privatization alone to fix its past contracting problems; instead, it must carefully evaluate privatization as just one of the many contracting and financing strategies that it can use to get the most out of federal cleanup dollars. DOE's experience indicates that the two strategies that underpin the privatization initiative—fixed-price contracting and full private financing—will not work effectively for all cleanup projects. Rather, a complex matrix of decision factors must be analyzed before deciding how to contract for and finance a cleanup. These factors include how much is known about the characteristics of the waste, the number of contractors willing to compete, the financing options, and the risks posed by the project and the entity that is best prepared to assume them. Our review of the Hanford project indicates that future analyses of financing options need to (1) use more realistic assumptions about cost growth for various types of contracts and (2) better reflect the actual risks assumed by the government. Because effective DOE management and oversight are critical to selecting the appropriate type of contract and financing mechanism, as well as to implementing the contract successfully, DOE needs to continue improving its technical, financial, and managerial oversight capabilities.

Background

DOE spends nearly \$6 billion each year to clean up the weapons complex and provide long-term monitoring of the remaining sites. In the past, DOE primarily approached this mission by signing cost-reimbursement contracts, telling contractors how to perform waste cleanup activities, and paying them for the amount of effort that was expended, regardless of what was accomplished. Under this arrangement, DOE financed the contractors' activities and owned the facilities. As part of a broader contract reform effort, and in an attempt to reduce costs and speed the progress of cleanup, DOE developed its privatization initiative.

DOE's privatization initiative is primarily an alternative contracting and financing strategy. For cleanup projects, privatization means using competitively awarded, fixed-price contracts to purchase cleanup services. The contractor agrees to design, finance, build, own, and operate treatment facilities. DOE specifies the required end products or services—for example, treating waste to meet disposal requirements—and generally leaves the methods and technologies used to achieve those requirements to the discretion of the contractor. The contractor is expected to finance the project with private money instead of using federal appropriations. This means that the contractor must either use its own funds (equity) or borrow money (debt) in order to proceed with design, construction, and related activities until the project is operational and the contractor begins receiving payments from DOE for successfully treating units of waste.

DOE expected that the competitive award process, the use of fixed-price contracts, and the requirement for private financing would bring contractors of a "best in class" caliber to its projects. With the contractors' own equity and/or debt funding the projects, DOE also expected that the contractors would have significant incentives to complete the projects on schedule and within budget. Finally, DOE expected that privatization would allow cleanup to move forward while deferring the government's own budget outlays for several years until the contractors constructed facilities and prepared them for operations.

The three cleanup projects we reviewed involved constructing and operating treatment facilities.¹ (See table 1). The largest, a project at Hanford with an estimated contract price of \$6.9 billion, involves treating highly radioactive liquid wastes. The two contracts at Idaho Falls, totaling about \$1 billion, involve treating less radioactive solid wastes, some of which are mixed with sludges and other hazardous materials, that are buried in the ground or stored in drums or boxes. DOE has ap-

¹In its January 1997 report on privatization (*Harnessing the Market: The Opportunities & Challenges of Privatization*), DOE identified three different types of privatization initiatives that the Department would implement—eliminating functions, transferring assets, and contracting out. Eliminating functions involves eliminating from the Department those activities for which a federal role is no longer required—such as the transfer of the Elk Hills Petroleum Reserve to the private sector. Transferring assets involves the sale or transfer of real property or personal property, including disposing of surplus assets such as precious metals in DOE's inventory. Contracting out involves either the Department's directly contracting for services previously provided by federal employees or site operating contractors, or site operating contractors' subcontracting specific tasks to other companies instead of performing the tasks themselves. The majority of DOE's privatization efforts have involved contracting out. These projects take three main forms—treating wastes at contractor-owned and -operated facilities, removing existing contaminated facilities and structures, and providing services using existing DOE facilities.

proved a total of eight privatization projects involving the construction and operation of facilities to treat wastes, although none have been approved since 1998. The eight projects are listed in appendix I.

Table I: DOE Privatization Cleanup Projects Reviewed by GAO

	Idaho Pit 9	Idaho advanced mixed waste	Hanford tank waste
Date of contract award.	Oct. 1994	Dec. 1996	Aug. 1998 ³
Contractor	Lockheed Martin Advanced Environmental Systems.	BNFL Inc.	BNFL Inc.
Wastes to be treated.	250,000 cubic feet of buried transuranic ¹ and hazardous wastes and contaminated soil.	65,000 cubic meters of mixed waste ² stored above ground in drums and boxes.	About 5 million gallons of highly radioactive wastes stored in underground tanks
Contract price ...	\$200 million	\$876 million	\$6.9 billion (est.)

¹ Transuranic waste contains man-made radioactive elements with atomic numbers higher than uranium, such as plutonium.

² Mixed waste is a combination of radiological contaminants, such as plutonium, and hazardous but nonradiological contaminants, such as degreasing agents or acids.

³ The original contract was awarded in September 1996. The contract was modified in August 1998 to reflect DOE's revised approach to the project.

Source: GAO's presentation of data from DOE.

DOE's Objectives in Privatizing Complex Cleanup Projects Have Not Been Met

DOE has not achieved the cost savings or the schedule and performance improvements that it expected privatization would provide. Specifically, DOE estimated significant cost savings for each of the three projects. To date, however, none of these projects have achieved savings. (See table 2.) Instead, DOE terminated the contract on the Pit 9 project, and intends to terminate the contract on the Hanford tank waste project, after the contractors estimated significant cost increases and experienced management problems. Savings on the advanced mixed waste project are too early to determine, since construction has not yet started. However, delays in starting construction are likely to increase the estimated contract price.

Table 2: DOE's Estimated and Actual Savings to Date on Three Complex Privatization Cleanup Projects

	Idaho Pit 9	Idaho advanced mixed waste	Hanford tank waste
DOE savings estimate.	\$134 million (1996 dollars)	\$670 million (1996 dollars)	\$2.1 billion-\$3.5 billion (1997 dollars)
Actual savings achieved.	None—project terminated	None to date—construction has not started; construction delays will likely affect costs and potential savings.	None—contract is being terminated and recompeted after significant growth in cost estimate

Source: GAO's presentation of data from DOE.

Contrary to DOE's expectations that privatization projects would stay on schedule, all three of the projects we reviewed experienced delays in meeting schedule milestones. In addition, a key feature of DOE's privatization initiative was that contractors would receive payments only for successfully treating waste. For two of the projects, DOE was dissatisfied with the contractors' performance, but it is unclear if DOE's dissatisfaction will prevent the contractors from being paid.

- The Idaho Pit 9 project was to start waste treatment operations in August 1996 and complete treating the waste by February 1999. However, the contract was terminated in June 1998 because of problems with the contractor's performance. Treatment of the waste is now being considered as part of a future project at the site. Although Lockheed Martin Advanced Environmental Systems (Lockheed Martin) provided a corporate guarantee of performance under the contract, the case is now in litigation. DOE is trying to recover the \$54 million already paid to Lockheed Martin, and Lockheed Martin is seeking additional payments of \$271 million for its work on the failed project. DOE project officials said that it is unclear how the issues will be resolved or how responsibility for the costs incurred on the project will be assigned to the parties involved.

- The Hanford tank waste project was initially to start waste treatment operations in December 2002 and complete processing about 6 percent of the waste by 2007. In 1998, DOE changed its approach to the project and revised the schedule to start waste treatment operations in February 2007 and complete processing about

10 percent of the waste by 2018. In May 2000, DOE directed BNFL² to stop work, and it is now in the process of terminating the contract because of dramatically escalating costs and concerns about BNFL's performance. DOE expects to pay BNFL for the allowable costs it incurred on the project as well as negotiated termination costs. DOE has abandoned privatization for this project and plans to recompile a contract for the design/construction phase and compete a separate contract for the operations phase. DOE hopes to keep the project moving forward in accordance with the revised schedule, but DOE officials expect some delays to occur as these changes are implemented.

- The Idaho advanced mixed waste project was to start waste treatment operations in March 2003 and complete waste treatment by December 2018. BNFL's February 2000 estimate shows that waste treatment operations will begin in November 2003 and are to be completed as scheduled in December 2018. However, several uncertainties may affect the achievement of these milestones. First, the start of construction has been delayed because BNFL has not obtained the construction permits from the state and the Environmental Protection Agency. Second, to resolve a lawsuit, DOE has agreed to pursue technical or regulatory alternatives to incineration for up to 22 percent of the waste to be treated. It is unclear how long the search for alternatives will take or whether it will be successful. Finally, it is unclear if the flexibility built into the operational phase of the project will be sufficient to absorb these potential delays and allow the project to be completed on time. However, at this early stage of the project, there are no signs that DOE is dissatisfied with BNFL's performance.

The cost, schedule, and performance problems we found on privatization projects are similar to problems found on other DOE cleanup projects that involved more traditional contracting and financing approaches. For example, our 1996 report on DOE's major system acquisition projects (generally projects costing \$100 million or more), none of which were privatization projects, disclosed that at least half of the ongoing projects and most of the completed ones had cost overruns and/or schedule delays.³ Reasons for these problems included inadequate project oversight and insufficient attention to technical, institutional, and management issues. Although privatization was an attempt to address these types of problems, it has not yielded the desired results.

Observations on DOE's Privatization of Complex Cleanup Projects

We have the following observations based on our past and current reviews of DOE's privatization projects:

- *Fixed-price contracts may not work effectively in all situations.* DOE has had a strong preference for using fixed-price contracts as a key component of its privatization program. Federal Acquisition Regulation (FAR) guidelines note that the conditions most conducive to fixed-price contracting include a clearly defined scope of work, a low probability of major changes to the work scope, the existence of proven technologies, sufficient price information to determine a fair price, and an appropriate allocation and sharing of risks. In contrast, the three projects we reviewed had changes in scope, uncertainties about waste constituents and technical approaches, unrealistic project schedules, or unresolved regulatory issues that ended up affecting schedules or costs after the contracts were awarded. For example, on the Pit 9 project, the contractor changed the design of the chemical treatment system, a major component of the project, after construction of the building had started. Eventually, the chemical treatment system was modified so much that it no longer fit in the building as constructed. These inconsistencies with the FAR guidelines make it more likely that significant changes will occur during the life of the contracts. Therefore, these projects may not have been good candidates for fixed-price contracts.

DOE's guidance on privatization encourages the use of fixed-price contracts for cleanup projects. In contrast, the U.S. Army Corps of Engineers has guidance that appears to be more consistent with the FAR guidelines for using fixed-price contracts. The Corps' general contracting guidance for hazardous, toxic, and radioactive cleanup projects states that fixed-price contracts are not the best contracting vehicle for complex radioactive waste cleanup projects. The guidance further states that the Corps increasingly relies on cost-reimbursement contracts for the design and operations phases of such projects. The primary reason the Corps has taken this position

²BNFL Inc. is the U.S. subsidiary of British Nuclear Fuels plc, a public limited company in the United Kingdom. The British government is the sole stockholder of British Nuclear Fuels plc.

³See *Department of Energy: Opportunity to Improve Management of Major System Acquisitions* (GAO/RCED-97-17, Nov. 26, 1996).

is that projects to clean up radioactive wastes can have significant uncertainties, including undefined amounts and concentrations of contaminants, which can affect costs and schedules. These conditions are similar to the uncertainties DOE has faced on its complex nuclear waste cleanup projects.

DOE has been more successful using fixed-price contracts for projects whose conditions have more closely matched those specified in the FAR guidelines. Generally, those projects were not complex cleanup projects that involved constructing and operating treatment facilities. For example, DOE has used fixed-price contracts at Idaho Falls and Hanford to purchase laundry services for such items as contaminated workers' uniforms. DOE's operating experience under these contracts has confirmed savings of several million dollars each year.

- Full private financing for complex cleanup projects may not be a viable approach. It is not clear whether full private financing for complex projects is achievable or whether it will provide needed assurance that contractors will perform effectively. According to DOE officials, including the Director of the Office of Contract Reform and Privatization, none of these privatized cleanup projects have secured commercial financing to date, although a few have been financed internally by the contractors. For example, on the Pit 9 project, Lockheed Martin financed project design and construction activities from its own equity funds and government progress payments. On the Hanford project, BNFL planned to use both equity and debt financing. However, in order to make commercial financing viable, DOE agreed to pay BNFL's commercial debt in the event of contract termination. DOE decided it would terminate the contract before BNFL obtained commercial financing. On the advanced mixed waste project, BNFL is currently funding activities using its equity. However, in the unlikely event that BNFL's financing is not sufficient for the entire project, DOE may need to consider other options, such as making progress payments or changing the contract to make financing the project more attractive to lenders. These potential changes would also affect the allocation of risk between the two parties.

Full private financing also has not ensured that contractors perform satisfactorily. For example, the Pit 9 contract was terminated and the Hanford contract is being terminated because of concerns about the contractors' abilities to successfully complete the projects. On the advanced mixed waste project, it is too early to tell if BNFL can perform successfully.

Overall, full private financing of cleanup projects is only one of several ways that DOE can encourage its contractors to perform. In addition to using different mixes of public and private financing, DOE could use an incentive fee structure in its contracts to tie a contractor's performance more closely to its potential profits.

- *A thorough analysis of financial alternatives and risks is an important part of structuring a successful cleanup project.* When DOE initiated each of the three projects we reviewed, it limited its analysis of contracting and financing alternatives primarily to a comparison between a privatized approach and a cost-reimbursement contract without performance incentives. In our previous work on privatization, we have criticized such a narrow approach to making important contracting decisions. On the Hanford project, after this Committee raised questions about the contract, DOE agreed to conduct a more comprehensive analysis of its financial alternatives. We are encouraged that DOE is considering a broader range of alternatives, but we have some concerns about DOE's analysis, particularly its assumptions about cost growth and its analysis of financial risks. These assumptions led DOE to conclude that privatization would be the least-cost alternative for the project.

In its March 2000 draft report, *Hanford Tank Waste Treatment Alternatives*, DOE concluded that cost growth on federally financed projects would more than offset the higher costs associated with private financing. We have several concerns about this conclusion. For example, DOE assumed that with the privatization approach, there would be no cost growth once the project started because the contractor would have incentives to control its costs. In contrast, DOE assumed that with other options, cost growth would more than offset the higher cost of private financing. However, DOE had no convincing evidence to support the assumption that the privatization approach would have no cost growth. In fact, its experiences contradict this assumption. We also are concerned about DOE's use of point estimates of cost growth rates. Since estimates of cost growth under the various options considered are not precise, using one cost growth rate can lead to a misleading conclusion about the most cost-effective approach. To clearly show the uncertainty associated with the cost growth estimated for various contracting and financing options, we believe it would be more appropriate to represent the cost growth as a range of values instead of a single point estimate.

DOE did not fully analyze or disclose the financial risks it incurred when it assumed responsibility, in the event of the Hanford contract's termination, for a large

portion of BNFL's debt on the project. With this action, which DOE took so that BNFL could obtain private financing, significant performance risk shifted from BNFL to DOE. By contrast, under a more typical privatization project, the performance risk remains predominately with the contractor. Had the Hanford contract continued, it is not clear that DOE would have reflected this shifting of the risk in its cost analysis of financial alternatives, as we suggested in our October 1998 report on this project.⁴ A more complete evaluation of the actual risks assumed by the government on this project could have shown that a significant portion of the potential cost of the project shifted to the government, since the government's liability for BNFL's debt has a cost associated with it. Such an evaluation might have found a different financing alternative more cost-effective for the government.

• *Regardless of the contracting and financing mechanisms used, effective oversight is essential to a project's success.* In our past work, we have raised concerns about the adequacy of DOE's technical, financial, and managerial oversight capabilities, since DOE's oversight has not been sufficient to prevent schedule slippages or cost increases. For example, on the Pit 9 project, DOE was unable to ensure that Lockheed Martin was addressing significant design, safety, and performance problems, and the contract was finally terminated. On the Hanford project, we reported in 1998 that effective oversight by DOE, especially in the areas of project administration, technical issues, and support activities, would be critical to the project's success. DOE has invested considerable effort in establishing oversight mechanisms for technical, health and safety, risk management, and business and financial aspects of the project. Even so, DOE officials said in April 2000 that they were not aware of the extent of the cost increases that BNFL was estimating for the project until shortly before BNFL submitted its proposal on April 24, 2000. This lack of awareness raises questions about the adequacy of DOE's expertise to oversee this aspect of the project. As DOE continues to explore ways to improve the performance of its cleanup program, it will be especially important to ensure the effectiveness of its technical, financial, and managerial oversight capabilities, both in structuring contracts and in overseeing them. DOE has an initiative under way to strengthen its capabilities in this area. This initiative involves improved coordination and accountability for project management teams and increased oversight of critical projects by senior DOE management.

In summary, Mr. Chairman, privatization has not been a successful approach for the complex cleanup projects we reviewed. In our view, DOE has not given sufficient attention to a number of factors when deciding how to contract for and finance such projects. These include (1) the type of waste and how well its constituents are understood, (2) the degree of competition available among private companies with the necessary cleanup expertise, (3) the financing options available, (4) the risks involved in the project and the entity that is best prepared to assume them, and (5) the capabilities of DOE's project oversight staff. In the future, DOE needs to more carefully evaluate these factors when making decisions about some of its most challenging cleanup responsibilities.

Thank you, Mr. Chairman and Members of the Subcommittee. That concludes our testimony. We would be pleased to respond to any questions that you may have.

Contact and Acknowledgments

For further information on this testimony, please contact Ms. Gary L. Jones at (202) 512-3841. Individuals making key contributions to this testimony included Carole Blackwell, Dwayne Curry, Doreen Feldman, Nancy Kintner-Meyer, Mehrzad Nadji, Tom Perry, and Bill Swick.

APPENDIX I

Approved DOE Privatization Cleanup Projects That Involved Constructing and Operating Facilities

Project	Location	Status as of June 2000
Tank waste remediation system	Hanford	Contract terminated during design; project to be recomputed
Pit 9	Idaho Falls	Contract terminated; parties in litigation
Advanced mixed waste treatment	Idaho Falls	Ongoing—preconstruction
Low activity waste treatment	Idaho Falls	Project cancelled
Spent nuclear fuel dry storage	Idaho Falls	Ongoing—preconstruction
Transuranic waste treatment	Oak Ridge	Ongoing—preconstruction

⁴See *Nuclear Waste: Department of Energy's Hanford Tank Waste Project—Schedule, Cost, and Management Issues* (GAO/RCED-99-13, Oct. 8, 1998).

Approved DOE Privatization Cleanup Projects That Involved Constructing and Operating
Facilities—Continued

Project	Location	Status as of June 2000
Environmental management waste management facility.	Oak Ridge	Ongoing—preconstruction
Spent nuclear fuel transfer and storage	Savannah River	No longer a privatization project—converted from private to federal financing

RELATED GAO PRODUCTS

Nuclear Waste: DOE's Advanced Mixed Waste Treatment Project—Uncertainties May Affect Performance, Schedule, and Price (GAO/RCED-00-106, Apr. 28, 2000).

Nuclear Waste: Department of Energy's Hanford Tank Waste Project—Schedule, Cost, and Management Issues (GAO/RCED-99-13, Oct. 8, 1998).

Department of Energy: Alternative Financing and Contracting Strategies for Cleanup Projects (GAO/RCED-98-169, May 29, 1998).

Nuclear Waste: Department of Energy's Project to Clean Up Pit 9 at Idaho Falls Is Experiencing Problems (GAO/RCED-97-180, July 28, 1997).

Nuclear Waste: DOE's Estimates of Potential Savings From Privatizing Cleanup Projects (GAO/RCED-97-49R, Jan. 31, 1997).

Hanford Waste Privatization (GAO/RCED-96-213R, Aug. 2, 1996).

Mr. UPTON. There was a bet up here that you would be exactly 5 minutes, and it was won.

I would just ask unanimous consent that a number of documents that we have been made part of the record. I know they've been cleared with both sides, so that's without objection. No one is here at the moment, but not a problem.

[The information referred to follows:]

Privacy & Security Notices



FOR IMMEDIATE RELEASE
May 3, 2000

NEWS MEDIA CONTACT:
Tom Welch, 202/586-5806

Richardson To Terminate BNFL Hanford Contract

Design Work to Continue During New Competition

U.S. Secretary of Energy Bill Richardson today announced that he will terminate the BNFL, Inc. privatization contract for a high level waste treatment facility at the Hanford Reservation in Washington State. The Department of Energy will seek new bidders and award a new contract by the end of this calendar year to complete the design work and to carry out the construction of the facility. During the transition period, the current design team will continue in order to avoid future delays.

"BNFL's proposal was outrageously expensive and inadequate in many ways," said Secretary Richardson. "We are committed to cleaning up the Hanford site as rapidly as possible. We will start competition for a new contract right away, select a new contractor by the end of this year, and conduct business so we should be able to meet our long term schedules for operating a waste treatment plant."

Richardson made the decision after BNFL's proposal was found to raise serious concerns in many areas, including cost and schedule, management, and business approach. Its technical design was found to be sound, but was also found to be over-conservative, shifting risk from the contractor back to the U.S. government.

In August of 1998, after a competitive procurement, BNFL said it had a high confidence it could design, build, own, operate and finance a waste vitrification plant for \$6.9 billion. On April 24, 2000, BNFL's proposal increased in price to \$15.2 billion dollars.

To ensure a smooth transition to a new contractor and to maximize the chances of meeting the timetable established with the State of Washington and U.S. Environmental Protection Agency, the Department will take the following short and long term actions:

- Formalize arrangements to continue the work of the current design team during a transition period;
- Conduct an expedited competitive bidding process for completion of the design and construction of a waste processing facility with an award by the end of this calendar year. This would likely incorporate technology developed and demonstrated during the initial phase of the BNFL contract; and
- Transition the operating responsibility in the near term to an existing contractor and solicit competitive bids for the later operation of the completed facility in the future.

During the last two weeks, Deputy Energy Secretary T.J. Glauthier led a departmental review of the BNFL proposal and options for moving forward. The Department's effort is managed by its Office of River Protection.

BNFL, Inc., is a subsidiary of British Nuclear Fuels, Ltd., a government corporation in England.



River Protection Project
Waste Treatment Plant
3000 George Washington Way
Richland, WA 99352
Tel: (509) 371-3500
Fax: (509) 371-3504

Mr. Michael K. Barrett
U.S. Department of Energy
Office of River Protection
P.O. Box 550, MSIN H6-60
Richland, Washington 99352

Direct tel: (509) 373-4143
Direct fax: (509) 373-0628

CCN: 013688

JUN 0 2 2000

Dear Mr. Barrett:

CONTRACT NO. DE-AC27-96RL13308

Reference: CCN 011981, letter, S. R. Morgan, BNFL, to M. K. Barrett, ORP, "Contract No. DE-AC06-96RL13308 - W375 -- Funding Notification Pursuant To Clause H.2," dated March 7, 2000.

In our letter dated March 7, 2000 (above reference), we notified the U.S. Department of Energy (DOE), as required by Clause H. of the subject contract (the Contract), that in the event DOE were to terminate the Contract after June 2000, that the amounts incurred under the Contract, plus the estimated amounts to be incurred under the Contract by the date of termination, less all payments previously made against the Contract, will result in a DOE termination liability that exceeds the obligated funds. DOE has informed BNFL Inc. that the Contract will be terminated for convenience effective June 8, 2000. This letter provides our current estimates of DOE's termination liability as of that date. Pursuant to the March 7, 2000, notice, the pertinent rights and obligations of the parties are defined in Clause H.2.b.4) of the Contract.

The obligated funds for the Contract as set by Modification A011 are \$281,500,000, of which \$31,500,000 has been paid for Part A work. The following data provides the status of costs and funding.

Fixed Price of Part A	\$31,500,000
Payments for Part A	\$31,500,000

Part B-1

Funds Obligated	\$250,000,000
Payments	0

The following table shows the termination liability under the terms of the Contract for a complete termination, effective at the close of business June 8, 2000, based on the incurred estimated termination costs as of the date of this letter.

Mr. M. K. Barrett
Page 2 of 3

CCN: 013688

Cost to Date through April 2000

(Actuals + Accruals)	\$192,341,637
Estimated costs through June 8, 2000	21,527,901
Undepreciated Value of Tangible Property	6,431,962
Lease Improvements	893,000
Other Leases	477,867
Contract Closeouts	5,075,277
Richland Closeout/Office Termination	
Staff & Experts	5,129,693
Estimated Home Office Costs Resulting	
from Termination	8,000,000
Legal & Financial Assistance	4,500,000
Relocation of Personnel	6,488,795
Severance	379,125
Interest (LIBOR + 100 (@7.2%))	13,880,005
B&O Tax	<u>1,216,791</u>
Subtotal	\$266,342,053
Fee (9%)	<u>23,970,784</u>
Total	<u>\$290,312,837</u>

The above estimated termination liability does not include the amounts that would be due BNFL Inc. in the event that DOE exercises its option for the Pilot Melter program under Clause H.49 or its option for certain intellectual property rights under Clause H.25.g. DOE would be required to obligate additional funds to the contract before either election could be effectuated.

Yours sincerely,


Steven R. Morgan
Commercial Manager

phd

Section H Special Contract Requirements

H.1 Description of Contract

This is a two-part Contract to acquire Hanford tank waste treatment services on a privatized basis. The Contractor has been selected as having the requisite technical, business, and financial capability to perform both parts. Part A is a fixed term, firm-fixed price effort to establish the technical, operational, regulatory, and financial elements required to provide fixed-unit-priced waste treatment and immobilization services on a privatized basis. Based upon the Contractor's performance of Part A work and review of Part A deliverables, the Contracting Officer will determine whether to authorize the Contractor to proceed to perform Part B. In Part B, the Contractor would, at fixed-unit-prices, treat Hanford tank waste utilizing facilities that are developed, financed, permitted, constructed, owned, operated, and deactivated by the Contractor. Part B work will be performed in two parts which are identified as Part B-1 and Part B-2.

H.2 Obligation of Funds

- a. The amount of funds obligated to this Contract with respect to the work covered by Part A is \$31,500,000.00.
- b. Part B of this Contract will be incrementally funded. The amount of funds obligated to this Contract with respect to the work performed in Part B-1 is \$250 million. The amount of funds obligated to this Contract with respect to the work covered by Part B-2 is \$0. Such funds may be unilaterally increased by the U.S. Department of Energy (DOE) and may be decreased by written agreement of the parties.
- 1) DOE's obligation to pay amounts due under this Contract is contingent upon the availability of appropriated funds from which payment for Contract purposes can be made. No liability on the part of DOE for any payment, termination liability, or other contractual requirement may arise from performance under this Contract unless and until funds are made available and obligated to this Contract.
 - 2) DOE agrees to use its best efforts to obtain Congressional authorization and appropriation of funds which are available until expended, and to obligate a sufficient amount of such funds to meet or exceed the termination liability stated in the fiscal year submittal of the BNFL project financial pro-forma or the estimated termination liability provided for in Standard 6, paragraph o of Part B-1.
 - 3) The Contractor will notify the Contracting Officer in writing whenever it has reason to believe that the amounts incurred, plus the estimated amounts to be incurred under this Contract in the next 120 days, less all payments previously made against those costs, if any, will in the event of termination for convenience, or otherwise, result in an amount to be due from DOE which exceeds the amount which has been obligated by DOE as specified in this Clause H.2. Such notice shall, at a minimum, identify: 1) cumulative amounts incurred or to be incurred during the next 120 days; 2) payments made to date; 3) expected payments to the point of exceeding amounts obligated; and 4) estimated payments for the remaining portion of DOE's fiscal year. Upon receipt of such notice, DOE will within 30 calendar days provide to the Contractor a detailed written plan of action as to how DOE will meet funding requirements.

Question
#1


Contractor's use, or act or failure to act which occurred before the Contractor assumed facility site responsibility on the effective date of Notice to Proceed with Part B-2 work, except that the Contractor shall be responsible for such liability resulting from its activities on the site occurring prior to the effective date of notice to proceed with Part B-2 work. Unanticipated subsurface and radiological surface site contamination which cannot be reasonably tracked to activities which are being conducted by the Contractor or its subcontractors shall be presumed to be pre-existing. The Contractor shall provide to DOE upon request such operating records which are or may be relevant to determining whether the contamination may be attributed to Contractor's actions or those of its subcontractors. Except where acts or omissions are required by the Contract, to the extent the acts or omissions of the Contractor cause or add to any liability, expense or remediation cost resulting from conditions in existence prior to the effective date of Notice to Proceed with Part B-2 work, the Contractor shall be responsible in accordance with the terms and conditions of the Contract for its pro rata share of any such liability, expense, or cost.

- b. The Contractor shall inspect the facilities and sites and identify to the Contracting Officer, in a timely manner, those conditions which it believes could give rise to a liability, obligation, loss, damage, penalty, fine, claim, action, suit, cost, expense, or disbursement, or areas of actual or potential noncompliance with the terms and conditions of the Contract or applicable law or regulation.
- c. The obligations of DOE under this Clause are subject to the availability of appropriated funds from which such payments can be made.

H.25 Termination Settlement

- a. Notwithstanding the Termination Clauses incorporated by reference in Section I, *Contract Clauses*, additional rights and responsibilities of the parties are specified in this Clause to effect the termination settlement.
- b. In the event of a termination for convenience, all right, title, and interest in all of the Contractor's tangible property, intangible property or technical data is retained by the Contractor, except as provided by the *Patent Rights-Acquisition by the Government* (FAR 52.227-13) and *Rights in Technical Data-Facility* (DEAR 952.227-78) clauses of this contract, unless DOE exercises its unilateral right in accordance with this Clause to take possession and thereby obtain title to any or all facilities and equipment at the site leased by Contractor related to the performance of this Contract, or other Contractor property located elsewhere that is solely dedicated to performance of this Contract. If DOE exercises this right, the Contractor shall be compensated in accordance with FAR 52.249-2, *Termination for Convenience of the Government (Fixed Price)* (APR 1984), except as otherwise provided for in this Clause. In addition, the Contractor will take all necessary steps to assign permits and authorizations for operation and closure of the facility to DOE or such other party as DOE may designate.
- c. Regarding technical data and other intellectual property, DOE may take possession of all technical data, including proprietary data and data obtained from subcontractors, licensors, and licensees, necessary to design, construct or operate the Facility ("Facility"), subject to the *Rights in Technical Data-Facility* Clause of this Contract, and any exceptions established in any other provisions of the Contract, as well as the designs, operation manuals, flowcharts, software, construction work in progress, completed facilities, equipment and other property and information necessary for performance of the work or operation of the

facility to treat the waste in conformance with the purpose of this Contract. Proprietary data will be protected in accordance with the limited rights data provisions of the *Rights in Technical Data Facility* and the *Limited Rights in Proprietary Data Clauses*.

- d. The Contractor agrees that it will, upon request by the Government, grant to the Government an irrevocable, non-exclusive, paid-up license in and to any inventions or discoveries regardless of when conceived or actually reduced to practice or acquired by the Contractor, and any other intellectual property, which are owned or controlled by the Contractor, at any time through completion of this Contract and which are incorporated or embodied in the construction or design of the facility or which are utilized in the operation of the Facility or which cover articles, materials, or products manufactured at the Facility: 1) to practice or to have practiced by or for the Government at the Facility, and 2) to transfer such license with the transfer of that Facility. The acceptance or exercise by the Government of the aforesaid rights and license shall not prevent the Government at any time from contesting the enforceability, validity, or scope of, or title to, any rights or patents or other intellectual property herein licensed.
- e. In addition, the Contractor will take all necessary steps to assign permits, authorizations, leases, and any licenses in any third party intellectual property for design, construction, operation, and closure of the facility to DOE or such other third party as DOE may designate.
- f. Notwithstanding any other provision of this Contract, including any clauses incorporated by reference in Section I, *Contract Clauses*, DOE's right to obtain disclosure or possession of or a license under any proprietary data, non-subject inventions, or other contractor, subcontractor, or third-party-owned intellectual property shall only become effective upon termination of this Contract for convenience, or as provided for in Clause H.49, "*Pilot Melter*", and DOE may only utilize such proprietary data, non-subject inventions, or other intellectual property either at or in the Contractor's proposed or existing facility or for the treatment of Hanford tank waste. Contractor is not obligated to convert, manipulate, explain or provide any other service with respect to transferred technical data, patent rights, or other intellectual property unless Contractor and DOE have mutually agreed upon a modification of this Contract.
- g.  If the Contract is terminated for the convenience of the Government and the Government is to take ownership of, or design, construct, or operate the facility, or have it operated for the Government, then appropriate value for rights in and licenses under any data which is not first produced during performance of this Contract, or any invention which is neither conceived nor first reduced to practice during performance of the Contract or any other intellectual property (regardless of whether obtained from Contractor, subcontractors, or third parties) embodied in or needed to design, construct, or operate the facility will be negotiated as a part of the termination settlement.
- h. DOE's maximum liability under a termination for convenience shall not exceed the amount of funds obligated under Clause H.2, *Obligation of Funds*, of this Contract.

Question #1 →

- 1) ' Inventory generation and reuse evaluation process;
- 2) Staff layoff, notice and severance;
- 3) Preparation for settlement, including the administration and settlement of subcontractor activities.

Specifically, provision for the funding of this interim period from obligated funds on a monthly basis, is required after financial closing. Upon termination, all access to debt and equity capital would be withdrawn and hence, the assigned special purpose entity has no further access to cash funds.

The recovery of all allowable and allocable costs associated with the special purpose project company have to be provided including overhead costs, general and administrative costs allocated to the company. In the event of a termination, the special purpose company will have no other business under its control to distribute these costs.

In the event of a Termination for Convenience, the Government shall make partial payments on a monthly basis to cover the ongoing costs related to preparing for settlement.

This Clause H.48 does not apply to an event that results in a termination for default. The Government reserves the right to use internal and external resources, including Government and other Contractors, in the evaluation and validation of costs proposed under this clause. Contractor business sensitive and proprietary information will be protected as required under this contract. The Contractor has the right to exclude personnel who are in direct competition with the Contractor.

i. FAR 52.243.1 Changes – Fixed-Price – Alternate I

Equitable adjustments made as a result of Changes to the contract shall permit the Contractor the opportunity to maintain his equity rate of return over the project, as if such Change had not been made.

H.49 Pilot Melter

As part of its corporate independent research and development, the Contractor has committed its own funds to construct, operate, and test a pilot vitrification melter ("pilot melter"). The pilot melter is not part of this Contract. In the event DOE terminates this Contract for convenience, DOE may at its option require that the pilot melter program be included as part of the termination settlement, and if DOE makes that decision, the reasonable, allocable, and allowable costs of the pilot melter program, not to exceed \$25 million, and a reasonable fee thereon shall be included in the termination settlement. In the event the pilot melter program is included in the termination settlement or the project proceeds to successful financial closing, the following shall apply: (a) DOE shall obtain license and other rights in any inventions or discoveries under the pilot melter program as though the pilot melter program had been done under the terms and conditions provided in 10 CFR 784.12, and similar rights in technical data, or other intellectual property developed under the pilot melter program as specified in the *Patent Rights Acquisition by the Government* Clause (FAR 52.227-13), the *Rights in Technical Data-Facility* Clause (DEAR 952.227-78), and the *Limited Rights in Proprietary Data* clause (DEAR 952.227-79), provided DOE may utilize such technical data or other intellectual property only at or in the Contractor's existing or proposed facility or for the treatment of Hanford tank waste (but the limitation in this proviso does not apply to inventions or discoveries); and (b) BNFL shall retain the right, title, and interest to any invention or discovery developed under the pilot melter program within any foreign

country. In the event the project proceeds to financial closing, the costs of the pilot melter shall be handled as provided in Clause H.37, *Part B-1* paragraph d.1).

H.50 Order of Precedence

Any inconsistency in this solicitation or contract shall be resolved by giving preference in the following order:

(a) Section H and paragraphs a-f of Section C.4; (b) the remainder of the Schedule (excluding Section C); (c) representations and other instructions; (d) contract clauses in Section I; (e) other documents, exhibits, and attachments; and (f) Section C (excluding paragraphs a-f of Section C.4).

H.51 Lobbying Restriction (Energy & Water Development Appropriations Act, 1999)

Lobbying Restriction (Energy & Water Development Appropriations Act, 1999) The contractor agrees that none of the funds obligated on this award shall be expended, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

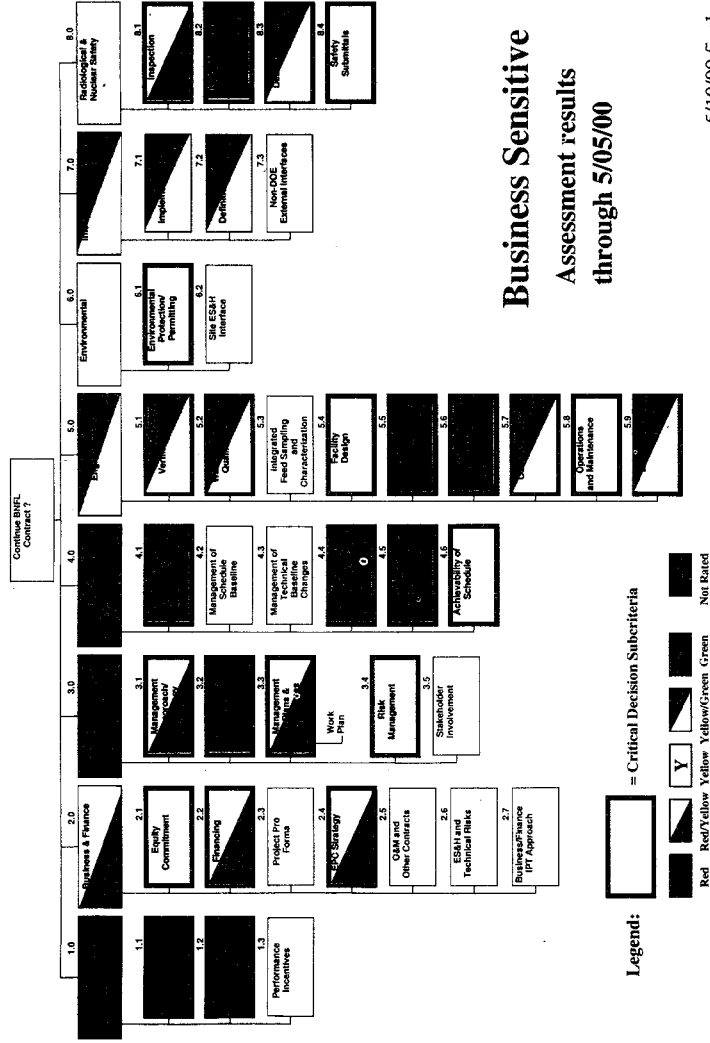
Business Sensitive



River Protection Project Status

BNFL Preliminary Performance Assessment
Through May 5, 2000





B-2 BNFL Assessment Criteria – Preliminary Performance Assessment Based on 7-day Acceptability Review







5/10/00 final

BNFL Preliminary Performance Assessment Summary

CONFIDENTIAL



<u>Evaluation Criteria</u>	<u>Observations</u>	<u>Met Contract Requirements?</u>	<u>DOE B-2 Confident?</u>	
	Contractual	<ul style="list-style-type: none">- Prices as submitted are unacceptable- Improper Certification of B-2 Prices- EPC represented as private investment (not Fed subcontract); prevents DOE oversight- \$300M error in tax calculation (~\$600M - \$700M with financing)	<ul style="list-style-type: none">YESTBDTBDN/A	<ul style="list-style-type: none">NONONONO
	Business /Finance	<ul style="list-style-type: none">- Equity contribution is conditional- EPC/JJV arrangements leave key issues unresolved- Financing terms are inconsistent with Contract intent- Financing terms shift risks to DOE & diverge from privatization criteria	<ul style="list-style-type: none">YESYESYESYES	<ul style="list-style-type: none">NONONONO
	Management	<ul style="list-style-type: none">- General Manager for B-2 not identified; no GM ownership for B-2- B-2 Design & Construction Manager in place- Incomplete QA/QC process implementation- Contingency added for risks which should be closed in B-1; shift risks to DOE	<ul style="list-style-type: none">NOYESYESNO	<ul style="list-style-type: none">NOYESNONO
	Cost/Schedule	<ul style="list-style-type: none">- Management costs & fees & contingency are driving unacceptable cost & price- No environmental & regulatory baseline assumptions provided- Base Capacity performance profile is unsatisfactory	<ul style="list-style-type: none">YESNONO	<ul style="list-style-type: none">NONONO

Legend:  Red  Yellow  Green  Not Rated

Business Sensitive
Assessment results through 5/05/00
5/10/00 final

BNFL Preliminary Performance Assessment Summary

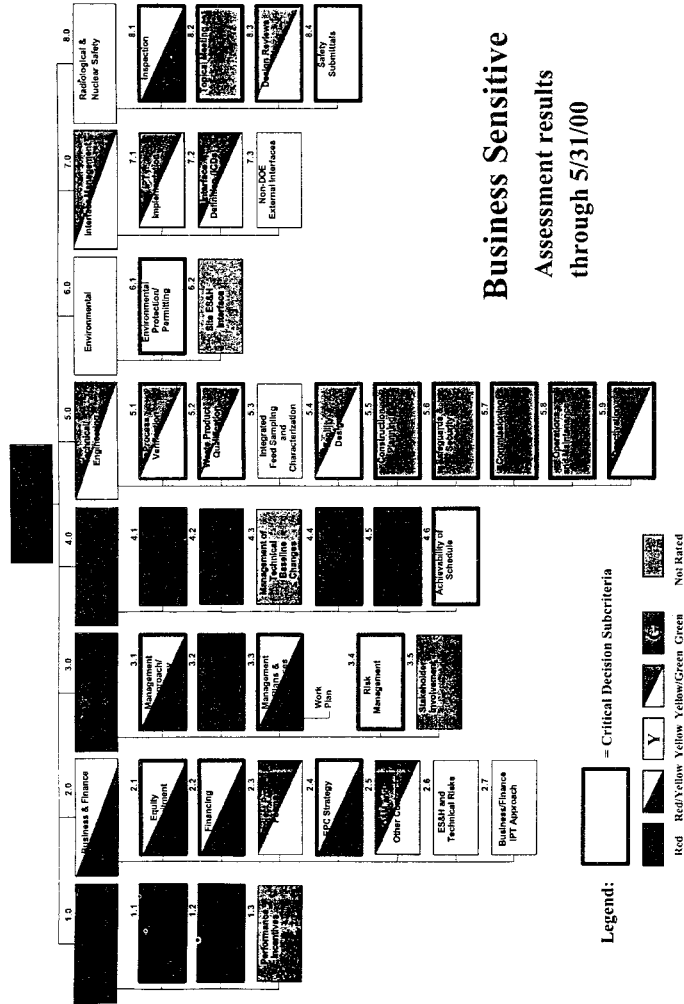
CONFIDENTIAL

<u>5/05/00</u>	<u>Evaluation Criteria</u>	<u>Observations</u>	<u>Met Contract Requirements?</u>	<u>DOE B-2</u>	<u>Confident?</u>
	Technical / Engineering	<ul style="list-style-type: none"> - Technical Process & facility design credible - Construction planning is thorough - Committed-to throughput is unacceptably low & overly conservative - Concerns about meeting A-7 design process by 8/00 	<div>YES</div> <div>YES</div> <div>YES</div> <div>TBD</div>	YES	YES
<div>Y</div>	Environmental	<ul style="list-style-type: none"> - Submitted DWPA on time - Incomplete technical information may not support scheduled air permit applications - Delisting & environmental plan are credible & ready for continued review 	<div>YES</div> <div>TBD</div> <div>YES</div>	YES	TBD
	Interface Management	<ul style="list-style-type: none"> - Interface Mgmt functional; but schedules and procedures need to mature & stronger change control, configuration mgmt, cross-interface integration needed 	<div>YES</div>	YES	YES
<div>Y</div>	Radiological & Nuclear Safety	<ul style="list-style-type: none"> - Inadequate QA Program implementation - Inadequate compliance with procedures - Still assessing whether AB has been brought up to-date 	<div>YES</div> <div>YES</div> <div>TBD</div>	NO	NO
				NO	TBD

Legend:  Red  Red/Yellow  Yellow  Green  Not Rated

Business Sensitive
Assessment results through 5/05/00 5/10/00 final

B-2 BNFL Assessment Criteria –Performance Assessment Based on Deliverable Review



B-2 Decision – Final BNFL Assessment

Criterion: 4.0 Cost and Schedule		
Subcriterion: 4.5 Reasonableness of Cost – Are all costs identified necessary for accomplishment of the agreed to statement of work and are they acceptable to both DOE and BNFL?		
Specific Considerations in Assessment:	Rating	% Eval. Complete
4.5.1 Are all cost elements defined in the cost estimate required by the project?	RED	
4.5.2 Are the quantities in the cost estimate necessary to complete the project?	RED	
4.5.3 Are material and equipment specified in the cost estimate necessary and reasonably priced?	RED	
4.5.4 Are the methods and productivity rates in the cost estimate reasonable?	Green	
4.5.5 Is the labor mix in the cost estimate appropriate for this type of work?	Yellow	
4.5.6 Is the amount of risk and contingency reasonable for this level of engineering development?	Red	
4.5.7 Did the DCAA audit take exception to how BNFL applies G&A rates, overheads, etc.?	Yellow	
DOE Expectations:		
4.5.1.1 The work scope defined in the cost estimate is the work scope described in the Integrated Management Plan and is based upon the technical baseline.		
4.5.2.1 Quantities of labor and material in the cost estimate are the same as the quantities described in the Integrated Management Plan.		
4.5.3.1 The material and equipment specified in the cost estimate are necessary and comparably priced to projects of similar size and complexity.		
4.5.4.1 The methods and productivity rates in the cost estimate are reasonable for a project of this size and maturity of design.		
4.5.5.1 The labor mix in the cost estimate is reasonable for a project of this size.		
4.5.6.1 The amount of risk and contingency are reasonable for the level of engineering development		
4.5.7.1 The DCAA audit did not take exception to how BNFL applied G&A rates, overhead, etc.		
Rating Options		
Green: Performance has given confidence that the Contractor will be successful in meeting B-2 expectations.	Yellow: Corrective actions are needed to be confident that the Contractor will be successful in meeting B-2 expectations.	Red: Performance has not given confidence that the Contractor will be successful in meeting B-2 expectations.
Assessment		
Expectations Exceeded:	Rating:	
Expectations Met:	Green	
4.5.4.1 Met. The productivity rates were developed using a rigorous approach.		
Expectations Not Met:	Red	
4.5.1.1 Not met. DOE is paying for multiple layers of management and a structure that limits DOE's access to those parts of the contract organization that is performing real work. Limit/control access is proposed in the BNFL contract.		
4.5.2.1 Not met. DOE is paying for multiple layers of management and a structure that limits DOE's access to those parts of the contract organization that is performing real work. Limit/control access is proposed in the BNFL contract.	Red	
4.5.3.1 Not met. DOE is paying for multiple layers of management and a structure that limits DOE's access to those parts of the contract organization that is performing real work. Limit/control access is proposed in the BNFL contract.	Red	
4.5.5.1 Partially met.	Yellow	
4.5.6.1 Partially met.	Red/Yellow	
4.5.7.1 Not met	Red	

Business Sensitive

B-2 Decision – Final BNFL Assessment

Basis for Assessment: Overall Assessment: Red - The costs for this project appear to be excessive. There are too many layers of expensive management and the costs associated with contingency are too high. The costs associated with the "brick and mortar" costs appear to be reasonable. Expectation 4.5.1.1 There appear to be excessive costs associated with management and contingency. These costs are not specifically disallowed by the contract. The rating is based on the costs associated with the element. Expectation 4.5.2.1 The quantities of management and contingency are greater than that necessary to complete the work scope. Several layers of management exist, and the project could be managed as well with less management burden. Expectation 4.5.3.1 There are excessive costs associated with management and contingency. The cost estimate has over 30% of the costs in the WBS elements associated with management. The management structure proposed in the cost estimate is excessive for this project. Expectation 4.5.4.1 The productivity rates were developed using a rigorous approach. Expectation 4.5.5.1 The proposed labor mix for construction appears to be reasonable. However, the labor mix between white collar and blue-collar personnel is not appropriate. There are a high percentage of white-collar personnel (due to the IJV – SPC structure of the proposed contract) that is not reasonable when compared to other projects of this size. Expectation 4.5.6.1 The level of technical risk appropriate for a project at this level of design. There are risks that have been added to the proposed costs that are not reasonable. BNFL appears to have maintained the risk but has shifted the cost for these risks back to DOE. Expectation 4.5.7.1 DCAA is having difficulty auditing the BNFL cost documentation.	
Recommended Path Forward: Expectation 4.5.1.1 Reduce the unnecessary management structure that is proposed in the contract. Ensure that access is provided to DOE for all major contractors within the BNFL organization. Expectation 4.5.2.1 Reduce the unnecessary management structure that is proposed in the contract. Ensure that access is provided to DOE for all major contractors within the BNFL organization. Expectation 4.5.3.1 Reduce the unnecessary management structure that is proposed in the contract. Ensure that access is provided to DOE for all major contractors within the BNFL organization.	
Signatures	
Reviewers: Date:	Debriefed with (Point of Contact): Date:
Team Lead Approval: Date:	Program Evaluation Team Lead Concurrence: Date:

DOE NEWS

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Jayne Brady, (202) 586-5806
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FOR IMMEDIATE RELEASE
October 30, 1996

CONVERSION OF ENERGY DEPARTMENT'S FORMER NUCLEAR FACILITY CREATES NEW JOBS IN TENNESSEE

OAK RIDGE, TN - A massive uranium processing building—one of the largest industrial facilities in the United States—will be cleaned up and converted to manufacturing uses by the year 2000, at the Department of Energy's (DOE) Oak Ridge K-25 Site in Tennessee. A group of businesses plan to use a unique technology for removal of contaminants and recycle of nickel in the building—creating significant new employment at this Site. DOE invites other businesses with interest in cleanup and reindustrialization of the Site, to submit offers in a Commerce Business Daily notice to be issued on Friday, November 1.

"Today's announcement is good news for Tennesseans. This reinventing government initiative not only solves an environmental problem, but will create jobs and stimulate the economy in the Oak Ridge area as well," said Vice President Al Gore. "President Clinton and I have worked to bring businesses and manufacturing jobs back into all corners of the country. This major cleanup effort at the Oak Ridge facility will improve the environmental quality of the region and provide more job opportunities to workers in the state," he added.

DOE estimates up to 500 new jobs will be created and \$600 million in taxpayer dollars saved because of these and other innovative approaches to decontamination and decommissioning.

"This action will reduce the cost of cleanup dramatically and transform an idle facility to a new source of jobs and economic development for the region," said Hazel R. O'Leary, Secretary of Energy. "The agreement marks another achievement under the Clinton administration's efforts to reduce the deficit, stimulate economic growth, and clean up the environment."

•MORE•

DOE 1047

OPTIONAL FORM NO. 10 (7-90)

FAX TRANSMITTAL	14 Nov 96
TO: K. K. K. K. K.	FROM: J. K. K. K. K.
ATTN: J. K. K. K. K.	PHONE: 77100
EXT: 51919	FAX: 76749
BUREAU OF ENERGY ADMINISTRATION	

As a result of the "Vision 2010" economic development workshop held in April 1996, a business consortium led by BNFL, Inc., and Manufacturing Sciences Corporation (MSC) has shown their capability to do this project and DOE intends to negotiate with them. BNFL and MSC are also working with other companies such as ATI, Energy Conservation Devices, and SAIC as part of the reindustrialization effort. The group proposes to provide significant private resources to this project and would use proven technologies to remove radioactive contaminants to allow commercial leasing of the buildings, and recycle nickel from the three large process buildings (K-29, K-31, and K-33). The nickel will be suitably clean for commercial reuse and for DOE use in waste storage containers. Cleanup is expected to begin in early 1997.

"We expect to announce additional agreements with industry to reuse other areas of the K-25 Site. DOE has a lot to offer industry in terms of location, an excellent workforce, and low-cost utilities. Access to Oak Ridge user facilities and technologies is an added value," said James C. Hall, Manager of DOE's Oak Ridge Operations.

Approximately 2.8 million square feet of floor space at the K-25 Site will be available for commercial enterprise by the year 2000 and an additional 2 million square feet by 2005. Nearly half of the K-25 Site will be removed from the DOE Environmental Management Program with this achievement.

The buildings contain large equipment for processing enriched uranium. Until August 1985, the facility was used to enrich uranium for use as commercial nuclear power plant fuel, in this country and abroad.

•DOE•

R-96-046

Additional information on Oak Ridge Operations can be found at our WWW Home Page located at http://www.ornl.gov/doc_orn/

DOE 1046

Response to Request for Information
Committee on Commerce
Tom Bliley, Chairman
May 12, 2000

1. Please explain which specific claims and what portion of the \$170 million in requests for equitable adjustments submitted by BNFL on the Oak Ridge contract are considered by DOE to be meritorious.

Response:

As the Department informed Committee staff during briefings on February 3 and May 3, 2000, BNFL submitted 10 Requests for Equitable Adjustments (REAs) in November 1999 totaling approximately \$116 million. In addition, BNFL orally advised DOE that it intends to submit additional REAs totaling approximately \$54 million covering three other issues. However, to date, BNFL has not submitted any REAs relating to these additional three issues.

The Department's preliminary assessment of the REAs that have been submitted indicates that there may be some merit to three REAs relating to: repair of building damage caused by a storm in June of 1999; repairs to building cranes which are needed for decommissioning; and, additional costs that may be incurred to handle greater than estimated quantities of materials in the buildings. In these REAs, the monetary adjustments sought by BNFL were: \$3.1 million for the storm damage, \$5.6 million for the building crane repairs; and \$48.8 million for additional material quantities. The storm damage REA has been negotiated for \$1.9 million and 70 days of schedule delay. The remaining REA issues are still outstanding at this time. Although the Department acknowledges there may be some merit to two of the outstanding issues, we believe that the incoming BNFL requests are significantly overstated, and to date BNFL has not provided sufficient supporting data to alter our view.

We note that the equitable adjustment issues described above do not include any adjustment to cover the cost impact resulting from the Secretary's decision to restrict the recycling of nickel. Although the Department has attempted to reach closure with BNFL on this matter, this issue, too, remains outstanding.

BUSINESS SENSITIVE

Mr. UPTON. Mr. Glauthier, the Department stopped work on BNFL's contract at Hanford because BNFL announced in March that the cost had increased on the project from \$6.9 billion to \$15.2, as you know. The Department, as I understand, was unaware of the increases until the last minute, but according to a December 1999 assessment by DOE, BNFL was already 9 months behind in producing a pricing methodology for the project. Why did they go so long?

Mr. GLAUTHIER. Let me give you a current picture of things. First of all, we have not actually stopped work. What we're trying to do, in this transition period, is keep the design work proceeding so that there will not be a complete break in either the work or, especially, in the team. We want to keep some of the technical—

Mr. UPTON. I'll let you finish in a second, but I had understood that DOE had planned to notice BNFL with a termination earlier, in fact this month, but they've not done so. Do you intend—does DOE plan to do that or not?

Mr. GLAUTHIER. We are having discussions with them and trying to finalize the details of the termination. We do need to do that.

Mr. UPTON. How much of the 6.9 have they actually been awarded, all of it?

Mr. GLAUTHIER. Oh, no. The question of how much we will pay for the work they've done is one of the areas under negotiation. We do need to pay them for work that they've done that will be useful and is a legitimate cost to the government. I said earlier that cost may be in the range of \$200 or \$300 million. We do not have a precise number, though. It will, obviously, take time to go over with them what they've actually done. We have stopped work on some aspects, such as the financing, which we do not want them to do because we're not going to proceed with that aspect of the project. The only things we've asked them to continue on is some of the design work while we carry out these negotiations.

We do intend to do this promptly. I know there were statements earlier about dates that we might have actually terminated the contract and the like. Those statements were made by people working the project at the site, who are in charge of trying to conduct the negotiations. Those were goals which they've not been able to meet because of the complexity of the issues. The decisions that the Secretary made were to make sure that we have a transition here where we'll issue an RFP to other firms in August, and that we'll make a selection of a new contractor in January of 2001.

Mr. UPTON. But don't you think that if they had done this pricing methodology rate earlier, we would not have been in this crisis?

Mr. GLAUTHIER. Well, our discussions with them back in the fall and in the winter were that we were very concerned about their ability to come in with an effective cost for us and a management plan that would show us they were really on top of this project. As recently as February, though, the briefings that our people received from BNFL still indicated that the costs were close to the level of the earlier estimate. They might have been—I guess we were expecting perhaps a 10 or 15 percent increase, instead of a \$6.9 billion cost, a cost around \$8 billion. That would have been a range we thought we could negotiate with them; we probably could come

to something that was workable. We were quite surprised when we got indications later that the price was way, way above that.

Mr. UPTON. I know that the Secretary indicated that he was—I think in his words, he was surprised at the jump from \$6.9 billion to \$15.2 billion. I just feel if you'd been on top of them and had been working on the pricing methodology versus letting it lag for 9 months, the surprise and the alarm would have not been—perhaps you would have been able to get this thing under control without allowing it to get out of hand altogether and be forced really to try and seek yet another contractor to clean up this mess.

Mr. GLAUTHIER. I personally had the program give me a series of briefings during the fall and then in the winter in detail about the project, its cost, and what the critical financial issues were going to be. The independent cost estimate that we got from an outside engineering firm, was carried out in the same timeframe. Whether it was completed—

Mr. UPTON. Did they show the same? Did they show it to be \$6 to \$8 billion versus \$15?

Mr. GLAUTHIER. Their cost was much closer to the original \$6.9 billion. It was way below \$15- and gave us some confidence that the technical work to be done here ought to come in closer to the original estimates.

Mr. UPTON. We're anxious to hear obviously from BNFL on the next panel. I know, Ms. Jones, we're actually going to ask you to stay a little bit longer if you're able to do that.

Ms. Jones, according to the BNFL statement, it said the fixed-price approach at the Hanford tank waste contract served the government and the taxpayer well. What is your reaction to that statement?

Ms. JONES. In our testimony today, we talked about certain criteria that we think are important for moving forward with a fixed-price contract. In this particular case I'm not sure that it was a good opportunity for using fixed-price contracting. There was a lot that was unknown. The type of contract that you're talking about was very large. The scope was not fully defined. So this was not the best case for using fixed-price contracting.

I know that BNFL points out that they have a good technical approach. They have begun the design, and I think from a technical standpoint they were moving in the right direction. I can't say whether they would or would not have those things under a different contracting approach.

Mr. UPTON. The DOE reportedly told the Congress that it expected savings using fixed-price controls in the magnitude of 25 to 50 percent as well as other benefits compared to a more traditional contracting approach. Your testimony stated that DOE privatization projects have not achieved those significant results, and what is your—why do you think that is the case?

Ms. JONES. I think one point I'd like to make, Mr. Chairman, is that we've reported in the past that the cost savings estimates that DOE has done haven't always been well-founded. Sometimes they compared apples to oranges, sometimes they didn't have a lot of good cost data to estimate savings. Sometimes they were using the wrong kind of base cost information.

But to set that aside for a second, what we said in our testimony today was that they really haven't achieved everything that they hoped for out of privatization, particularly for these very large, complex projects. Pit 9, as we've all talked, that's in litigation. Certainly there will be no cost savings from that project. The Tank Waste Project at Hanford, DOE has already said they are not moving forward with that as a privatized contract, so, again, as they defined it, it has not worked. We have not seen cost savings there. For the Idaho Project, we have seen some indications that delays could affect the cost and the price, but there still is hope there that we can get some cost savings from that project as you move forward.

Mr. UPTON. As you know, this morning we sort of looked at Pit 9 and Hanford and a couple of others really, just a handful. And Mr. Glauthier's testimony talked about, I think, 132 different sites that you've done, and 37, I think, you indicated had been completed. Are we looking at it wrong; is this just sort of a glaringly bad example, or is it—in general do you think that it's working? Have we just picked the wrong subset with tremendous increased costs because of this? What kind of sample—what kind of draw do we have here?

Ms. JONES. GAO has always supported the kind of contract initiatives that the Department has been going through, and we supported fixed-price contracting, but the point is you have to use it in the right circumstances. I think the very large, risky projects that we're addressing here today probably were not the best choices, but fixed-price contracting has and will work in other situations.

Mr. GLAUTHIER. Could I add to that, Mr. Chairman?

Mr. UPTON. Go ahead.

Mr. GLAUTHIER. I think it's natural that some of these reviews will focus on the biggest projects and ones that seem to be having some trouble. If we don't think of it as a statistically representative sample, there are important lessons to be learned here.

I think there is a lot of agreement in terms of why some of these things haven't worked in some of these cases, but I did want to point out in my comments earlier there are a large number of these kind of contracts out there. If we looked at some of those, I think you'd find there have been successes, as well as these others.

Mr. UPTON. One of the reasons I was a little bit late coming back from the floor from the vote, I wanted to find Joe Barton, who had chaired—I've not always been a member of this subcommittee, and I know that Joe chaired—Mr. Barton chaired these hearings as they looked at Pit 9 back in 1997, and as I talked with Joe—he can't believe it's still coming up—but in regard, one of the things we learned from that hearing was that DOE lacked the experienced personnel and management ability to manage and oversee the complex fixed-price contracts, and at that particular hearing Secretary Pena committed to the subcommittee that he would focus attention to Federal staffing issues to address the problem. However, a recent independent assessment of DOE's project management team at Hanford identified, quote, significant corrective actions are required before DOE can proceed even if BNFL had provided an acceptable bid.

The question that I and other members of the subcommittee have to ask is what's happened to that commitment to improve the management capabilities, particularly in light of the fact for 9 months no one really tracked when some of this data was going to be available, and all of a sudden the cost doubled? It's not a minor sum from 6.9—some of our appropriator cardinals would like to have the amount of money that's the difference between 6.9 and 15.2.

Mr. GLAUTHIER. You're absolutely right, which is why we did not go ahead with it. We organized ourselves last winter when we first became concerned about some of this, so, when they did give us a proposal, we were able to evaluate it quickly and take action.

On the broad question of management and how we can improve and strengthen our project management at the Department, we agree that that is very important. I've only been here a little over a year. One of my goals is to try and help improve that. I'm a businessperson and not a lawyer. In this town, that's unusual, but I think it is an indication of what we're doing.

Last June, Secretary Richardson launched an initiative on project management, which applied to the whole Department, not just the environmental cleanup area. We've set up a new office. I mentioned the Office of Engineering Construction Costs, which is staffed by people we've brought in from outside DOE. It's staffed by General Clair Gill, who is a retired general of the Army, who has a lot of experience in project management. We brought in staff from the Corps of Engineers and from the Navy. We borrowed staff from NASA to try to get experience from the whole government on how to manage large, complex projects. That's just one example. We're trying a lot of initiatives so we can address this problem.

Mr. UPTON. Do you think that new management team will, in fact, prevent problems like this in the future? Will they have the tools and the funding and proper oversight to do that?

Mr. GLAUTHIER. We certainly hope that they'll help us reduce these problems. I don't think we'll ever totally eliminate them, but we're setting up a review system so that every major project will be reviewed. We've put in place new controls so that every project in the Department that's over \$400 million total cost, has to come to me and a board review at four critical decision points. There will be a review before the decision is made to go to each next step: to go into formal design, to go into construction, to go into operation. Those reviews will be a very disciplined way to make sure we take a very careful look before we go to the next step. Those are the new things that we haven't done.

Mr. UPTON. I know my time has expired, but let me just ask one more question before I yield. Have you worked with the GAO hand and glove, particularly with some of the recommendations that they've made, and what is their reaction to what you've done?

Mr. GLAUTHIER. I'm sure we can work more closely. We have tried to take the recommendations and work with them. And, we have benefited from the studies that have been done over the last 10 years. We'll look for more opportunities to continue doing that.

Mr. UPTON. Ms. Jones, what's your reaction to the new team that has a couple of offices in the hallway?

Ms. JONES. We haven't looked specifically at the new initiatives, such as the new Office of Project Management at headquarters. We

think the Department is putting some things in place that will help in the future.

One point I wanted to make is that we are talking about a major culture change in the Department, a culture from totally relying on the contractor to trying to be more proactive in terms of management and oversight. This is going to take time.

But the other thing that I want to point out is that the comments you made earlier about the independent group that came in and looked at the Hanford project, they were talking about the folks onsite and having the right people in place onsite, not people back in headquarters. I think that the Department needs to look at both of those issues.

There were also some comments in an independent report that the roles and responsibilities were not clear between headquarters and the site. These are the kinds of issues that we've been raising with the Department for years; issues that they still need to continue to work on.

Mr. UPTON. Mr. Bryant.

Mr. BRYANT. Thank you, Mr. Chairman. Again, I thank the panel.

Ms. Jones, I have three questions for you. What I'm going to do is read them to you and then let you acquire this record. If you could answer those in writing as a late filed exhibit to your testimony, I would appreciate it.

Ms. JONES. I'll be happy to.

Mr. BRYANT. I have several questions for Mr. Glauthier that I need answered today, if possible, so we can kind of move through this quickly.

In terms of fixed-price contracting, it's been a key element of DOE's privatization initiative. What concerns do you have about DOE's use of fixed-price contracts for complex nuclear waste clean-up projects?

No. 2, DOE expected that the private financing of cleanup projects would shift the performance risk to the contractor and create significant incentives for them to perform, yet this appears not to have happened. And is full private financing a valid strategy for cleanup projects?

Third question: GAO has frequently raised questions about DOE's oversight of its contractors as to whether it's effective or not, especially with fixed-price contractors. What are your concerns about DOE's oversight capacities or capabilities?

If you could just file those in written response, and I will like to move on and ask some questions.

Ms. JONES. We'd be happy to respond for the record.

Mr. BRYANT. Thank you.

[The following was received for the record:]

Question 1. What concerns do you have about DOE's use of fixed-price contracts for complex nuclear waste cleanup projects?

Response: DOE must carefully evaluate fixed price contracting as just one of many contracting strategies that it can use to get the most out of federal cleanup dollars. Complex cleanup projects typically have significant uncertainties including undefined amounts and concentrations of waste contaminants, which can affect costs and schedules. DOE has been more successful using fixed-price contracts when project conditions more closely match those specified in Federal Acquisition Regulations (FAR) guidelines. Those conditions which are most conducive to fixed-price contracting include a clearly defined scope of work, a low probability of major

changes to work scope, the existence of proven technologies, sufficient price information to determine a fair price, and an appropriate allocation and sharing of risks. Therefore, fixed-price contracting may not be the optimum contracting method for complex cleanup projects like the ones we reviewed.

Question 2. DOE's expected that the private financing of cleanup projects would shift the performance risk to the contractors and create significant incentives for them to perform, yet this appears not to have happened. Is full private financing a valid strategy for cleanup projects?

Response: Based on DOE's experiences to date, full private financing may not be a valid strategy for complex cleanup projects. DOE's privatization approach has not been successful in shifting performance risk to the contractor for complex cleanup projects like the ones we reviewed. Thus far, none of DOE's privatized projects have secured commercial financing, although some of them have been financed internally by the contractors. Also, the government may have to accept more of the risk than originally envisioned to ensure that the contractor can obtain private sector financing. For example, on the Hanford tank waste project, in order to make commercial financing viable, DOE agreed to pay BNFL's commercial debt in the event of contract termination. Consequently, much of the performance risk DOE planned to shift to BNFL shifted back to the government. Given that shift of risk back to the government, we question whether the high cost of full private financing would have resulted in a "best value" for the government on that project.

Question 3. What are your concerns about DOE's oversight capacities and capabilities?

Response: Our concerns regarding DOE's oversight of fixed-price, privatization contracts are similar to concerns we have reported in our past work on other projects. In 1996, we raised concerns about the adequacy of DOE's technical, financial, and managerial oversight of large projects because DOE oversight had not been sufficient to prevent contractor performance problems that resulted in schedule slip-page and/or cost increases. We identified the same kinds of concerns on the complex privatization projects we reviewed. For example, DOE spent considerable effort in establishing oversight mechanisms for technical, health and safety, risk management, and business and financial aspects of the Hanford tank waste project. However, the external independent review panel that recently assessed the project's readiness to proceed stated that DOE's project management systems were not fully implemented, oversight positions were not fully staffed, and key project risks were not defined and mitigation plans were not in place. Not surprisingly, DOE officials said they were unaware of the cost increases that BNFL estimated for the project until just before BNFL submitted its contract pricing proposal in April 2000. This lack of awareness raises questions about the adequacy of DOE's effort and expertise to oversee this aspect of the project. As DOE continues to explore ways to improve the performance of its cleanup program, it will be especially important to ensure the effectiveness of its technical, financial, and managerial capabilities, both in structuring contracts and in overseeing them.

Mr. BRYANT. In terms of this issue with Hanford, after BNFL submitted its April 24 \$15.2 billion proposal for cleanup of the Hanford tank, Secretary Richardson said he would terminate, as you have mentioned, BNFL's contract for tanks. Further, it's my understanding that you were to submit options to BNFL's contract in mid-May to the Secretary. What was the basis—his basis to terminate their contract, basis of his decision, and do you support that decision?

Mr. GLAUTHIER. Yes, I certainly do support the decision. The basis was a combination of cost, recognition that the cost was completely out of the range of what we felt was reasonable as demonstrated by both an independent cost estimate by an outside engineering firm as well as by our own analysis, and concern about the management team or lack of management team that was proposed. The firm, for example, was supposed to identify its project manager and the key management personnel who would carry this project forward, and that was not done in the submission that we received in April.

Mr. BRYANT. What options were presented to the Secretary in your report to him in May, and which did you recommend?

Mr. GLAUTHIER. We actually made the report on May 8. We did it a week ahead of schedule and felt that we'd been able to complete the analysis well enough to do it then. We were anxious to move quickly. We did not want to take all the time.

We discussed with the Secretary options that would have included going ahead with one firm, trying to conduct basically a sole-source negotiation with one company to take over the contract and do the design and construction. We talked about whether or not to simply terminate the contract, hold a competition, and do nothing until we reached an appropriate point for a break in the work that was going on. The course we finally did decide on was to have a transition period of several months until we could award a new contract in January, try to keep the design process going so we make some more progress on that, and keep the key technical people together who would be available as a resource to whoever the successful bidder is. But the goal is to get quickly to issuing a new RFP, doing that in August, and trying to invite as much competition as possible so we can select a firm who would be qualified to do the work, technically sound, and give us a good competitive price.

Mr. BRYANT. One result of the termination of the BNFL contract is that the work schedule is going to slip. Would that be a fair statement?

Mr. GLAUTHIER. Some dates, of course, will slip, like beginning construction next summer probably won't be able to be met. But this option that we've chosen has the possibility, and the plan is, to still complete or meet the two major milestones that we and the State are most focused on. One of those is to have this facility actually constructed and ready to go into construction by 2007. The other is 2018, to complete the cleanup of the waste. We believe that we can meet those dates, although there is less contingency in terms of time slack in the schedule to do that.

It's going to be tight, but that's one reason we chose this option. We could still meet the milestones that we've agreed to with the State.

Mr. BRYANT. Is it possible that in the future bidding that the dollar figure by any new contractor could also reach that same figure that BNFL proposed?

Mr. GLAUTHIER. We certainly hope so. One of the things we've done is restructure the contract as well.

Mr. BRYANT. You hope it reaches the same number that BNFL had proposed?

Mr. GLAUTHIER. The original number.

Mr. BRYANT. Just to be clear, that was not a very clear question, I apologize, as to which number I was talking about.

Mr. GLAUTHIER. One thing I did not mention as I described the options earlier presented to the Secretary is that each of those included a common element of restructuring the contract. The original contract was to design, build, and operate this facility for the whole 20-year period. What we've changed is to have one contract to design and build the facility and another contract to carry out its operation.

We did that for a couple of reasons. One is we want to find a firm who has the best qualifications to design and build this facility. There are many more firms who would consider doing that than there are who would do that and also operate it——

Mr. BRYANT. That was in the \$15 billion proposal from BNFL. Did that include operating it, building it and operating it?

Mr. GLAUTHIER. Yes, it did.

Mr. BRYANT. Actually you're restructuring it to lessen the job requirements, take away the operation, and just go back to the building, which possibly BNFL could do it cheaper than \$15.2 billion?

Mr. GLAUTHIER. The cost estimate they've given us for that portion was also higher than it should have been, and we felt that it was not responsive either. So, we're comparing the appropriate pieces of this as we go forward.

Mr. BRYANT. Let me ask you another question. The BNFL Company claimed in its testimony that will follow that it has for the first time created a technical solution for the Hanford tanks. Do you agree with BNFL's assessment of its technology?

Mr. GLAUTHIER. We do think that the technical approach of using the melters and the like is right. We are very puzzled, frankly, that, with that assessment, they still came in with a price that was so much higher than they had given us originally. This is their technology. The reason they were chosen originally is that they are the firm who should be in the best position to give the government a good price and be able to deliver this well.

There are two issues that cause us problems. One is their design; the pace of design was very slow. Instead of getting to 30 percent design, which is where we really need to be to lock in a cost estimate, they'd only gotten about 13 percent of the design done. So there was a lot more uncertainty. They weren't as responsive on working this as they should have been.

Another example involves one of the key elements of their technology: the melter, the glass melter that will do the vitrification work. The melter is part of their technology and part of what they already have in other operations, in England, for example. They projected in their original estimates that the melter would be available 60 percent of the time, so, of course, that affects your costs. They built a pilot here in Maryland that operates better than expected. It was available a larger percentage of the time. It actually produced at a higher rate of output than expected. It was about a third—or, in the end, about half of the output that we would have for the full-size. So it was a pretty big pilot. It wasn't just a small, little pilot.

Still, in the final estimate they gave us in April, they reduced the availability assumption to 40 percent. We thought they'd take it from 60 up to 70 or 80 percent, and it would make more of an economic proposal. For some reason they made it more conservative and assumed the melter to be less available than before. This is one example, but it puzzles us why this has come out the way it has.

Mr. UPTON. If the gentleman would just yield.

Mr. BRYANT. I'd be happy to yield.

Mr. UPTON. Did they provide a line item—when they bumped the cost from 6.9 to 15, did they—was that a line item in terms of the

increases? For that particular example that you cited, what was the cost change?

Mr. GLAUTHIER. They provided a whole detailed new cost estimate. Essentially the original one was a preliminary estimate, and then this new one was a complete one.

Let me defer to the Assistant Secretary here, Carolyn Huntoon.

Ms. HUNTOON. When they put in the proposal to us on April 24, it was the final delivery of a series of packages of information, which had been coming in for several weeks, I believe. The data was for the team to assess, and each item that was to be specified was discussed, and the numbers were given. In our immediate assessment that followed in the week or so afterwards, before the Secretary made his decision, there were many, many items that had increased in cost that were delineated in that report.

Mr. BRYANT. Mr. Chairman, I just have one follow-up question and not necessarily on that point, but would like an answer. In January of this year, the Secretary decided to stop the sale of nickel from the BNFL Oak Ridge project. I think I alluded to that in my statement. Initially it was envisioned that BNFL would derive part of the funding for the contract and potentially some of its profit from the recycling from the sale of this clean material specific to nickel. What will be the cost to the government of this decision, and what path from here have you recommended on the nickel to BNFL?

Mr. GLAUTHIER. We are still trying to make the final decision on how to handle some of these materials. The decision at that time was that because the material had only surface contamination, it could be decontaminated and might be recycled as long as it met standards that were consistent with the Nuclear Regulatory Commission standards for other operations. But material that was volumetrically contaminated, internal to the material, could not be recycled. We clearly would have to absorb some costs of storing that material until such time as it might be able to be used or could be used in other applications.

Let me refer this question in terms of detail cost to the Assistant Secretary.

Ms. HUNTOON. Again, that is one of the issues we are discussing with BNFL right now: the cost of them not selling the recycled nickel. The costs depend on what we would do with the material, whether we would hold it or dispose of it or what. But I think they are talking in terms of \$30 to \$50 million range in there. That was one of the assessments that we made when the Secretary made the decision to put a moratorium on the release of volumetrically contaminated materials, that it would be at some cost, and we just haven't locked in that number yet.

Mr. BRYANT. Was the discussion as part of this specifically saying, what we want you to do, BNFL. I talked about specific proposals. Did that include their recycling not only surface-contaminated, but volumetrically contaminated, everybody had their eyes wide open as to what we were dealing with when the contract was agreed to?

Mr. GLAUTHIER. Yes, that's right. I wasn't there and don't know the full assessment of this. But, this year, when the Secretary made his decision, it was based on the question of health; do we

have an appropriate standard to be sure we're protecting the public health and safety? So, we realize that having made a change like this, and it is a change in the basic ground rules of the contract, we have a responsibility to cover that cost.

Mr. BRYANT. I agree with that, and certainly health and safety is a factor. My concern is the Secretary should have concluded that before the contract was issued so that we haven't, in effect, had to exhaust all this money correcting that error. In other words, that determination should have been made before the contract was issued that you cannot do this, rather than allowing the BNFL to build this into their bid and then come back after the fact and make this type of change, albeit a good one, and cost the government between \$30 and \$50 additional million dollars.

Mr. GLAUTHIER. The contract was signed in August 1997 before either Secretary Richardson or I was there and before the Assistant Secretary was there as well. So I agree with your point. It, clearly, should have been done originally, but at this point we are presented with the information that raised health and safety questions for us. What we can do is try to deal with the issue at the time.

Mr. BRYANT. I understand, but there was a Secretary there before Secretary Richardson.

Mr. GLAUTHIER. Yes. I think your point is right. We should have considered all those things.

Mr. BRYANT. Thank you. Thank you for your testimony. Thank you for listening to us.

Mr. GLAUTHIER. Thank you.

Mr. UPTON. Mr. Burr.

Mr. BURR. Thank you, Mr. Chairman.

Who did the performances of the evaluations constantly of the progress of contractors at Hanford?

Mr. GLAUTHIER. The BNFL project we've been talking about?

Mr. BURR. Yes, sir.

Mr. GLAUTHIER. The team there onsite at Richland, Washington, has been there for about a year and has been—

Mr. BURR. Who does the performance reviews, DOE, or do you let BNFL do their own?

Mr. GLAUTHIER. Oh, no. The Department of Energy does those.

Mr. BURR. Is that somebody onsite?

Mr. GLAUTHIER. We have our Federal staff there. The Office of River Protection is doing those and then reporting to the Environmental Management Office here at headquarters on a regular basis.

Mr. BURR. Did they ever give DOE headquarters a clue that we've got a problem; this is going to be much more expensive than what we thought it was going to be?

Mr. GLAUTHIER. Well, my understanding, and I'll let the Assistant Secretary respond in a moment, is that as late as February we were still asking the questions, and the answer we were getting from the contractor was that the cost was going to be in the \$8-, maybe \$8.5 billion total range, and we were concerned at that level, but we thought we could probably negotiate or work with them around the details. We had no clue it was going to be that high until just a few weeks before the bid.

Ms. HUNTOON. I think in the evaluation of the contractor, the Department of Energy staff that's onsite at the Office of River Protection was working relatively closely and watching and evaluating products from the contractor. We would get at least quarterly status reviews back in Washington of what the contractor was doing right and what they were doing not so well, with red, green, and yellow lights on various issues including—

Mr. BURR. On the cost schedule they had yellow lights in November, they had yellow lights in February, and it wasn't until we got to May that we switched from all yellow to all red lights.

Ms. HUNTOON. Well, that's right.

Mr. BURR. I'm looking at your chart, I guess.

Ms. HUNTOON. Yes.

Mr. BURR. Does that display the surprise?

Ms. HUNTOON. Yes.

Mr. BURR. Nobody at DOE knew there was a problem?

Ms. HUNTOON. The initial indication that we had, as the Deputy Secretary was saying, was in the February to March timeframe, when Mr. French, who is the project manager out there, was telling us that he got a feeling that the cost was creeping up. So, how much are we talking about? Well, this is when we were talking in the \$8-ish—\$8 billion range. Early April we had a visit, informal visit, from BNFL both out at Richland and here in Washington, and they indicated to us that the costs had grown considerably. I know T.J. and I both expressed our unhappiness with that information and the desire to make sure that, when they came in, there were alternatives with these cost numbers.

Mr. BURR. The 1st of May, the Secretary put out a press release, and I quote, BNFL's proposal was outrageously expensive and inadequate in many ways.

Share with us, if you will, where it was inadequate. I think we can all agree it's outrageously expensive. I'm curious as to where the other—because I don't pick up the "inadequate in many ways" in the DOE evaluation of performance.

Mr. GLAUTHIER. I think the most striking point for us was the inadequacy of the management plan that they had. The key question is this: you've got a project this complex, that is going to be run for 20 years; it's going to involve design, construction, and operation of this facility. Who is going to run it, who is really the person in charge, and what is that top team? That was one of the key points of evaluation for whatever they gave us.

In April when they gave us a submission, they did not have that project person identified. We didn't know who that project manager was going to be. We don't see the ability of this firm to carry out the project successfully, so, even if the price had been what we originally expected, we would have had questions about their ability to actually complete it.

So we were already concerned, and we were watching for what they were going to give us to show that they were capable of running this project effectively at any price.

Mr. BURR. Clearly you've made an evaluation of BNFL as the contract is unfolding. The natural question would be—and I think GAO probably suggested this in every review that they've made—if you had a contract like this, why would there not be a separation

between design and construction and then go back and look at a contract for operation?

Mr. GLAUTHIER. Well, the idea originally was to take an innovative approach. This firm already operates a similar kind of technology, vitrification elsewhere, and instead of paying them in the traditional way for each of these steps, if they go out, raise the financing, design and build this facility, then we'll pay for the product that they produce. As you provide services and produce these glass logs, we'll pay you by the log. And if you could have the freedom to design and build this thing without all the complexity of the government procurement system watching over your shoulder all the time and give you more of the ability to operate as would you in the private sector, then, the contention was that the costs would be lower, that everything would go faster and be less expensive.

The concept is pretty good. If the technical side of this was good enough, if the characterizations of the waste was good enough, if the technical performance, the equipment was right, the concept wasn't bad. That's why it was all lumped together, why it was all one.

Mr. BURR. Ms. Jones, you want to comment on what he said?

Ms. JONES. I want to comment on a number of things that he said, Mr. Burr. One is that I think innovation is terrific, and I think that the Department is showing us some of that, but I also believe that for this particular contract, they were advised early on that maybe fixed-price and full private financing might not work. You're talking about a very complex, very, very costly project, and I think the risk involved for the contractor maybe wasn't totally factored into the analysis that was done. I think this committee and the GAO report that we did in 1998 asked them to look at financing alternatives.

Mr. BURR. Would you not agree in the structure that we've seen not only in this contract but other contracts under a fixed price, that it is fixed price until you get to the section of the contract that addresses unforeseen costs, where it's a negotiation between the contractor and DOE, or the incentive based upon the need to accomplish something by a certain date, or performance bonus based upon evaluation? There are lot of ways in the private sector this would not be considered fixed-cost, would it?

Ms. JONES. Correct. And I also think DOE needs to determine whether it should have a separate design phase, separate construction phase, separate operations phase, and when looking at each of those phases, what's the right contracting method to use? Should it be fixed-price? There are different kinds of ways to go about it, and the alternatives should be assessed for each phase.

Mr. BURR. Let me move to another set of questions, if I could, Mr. Secretary. I think we've discussed this 2-year period of BNFL and their design of this treatment facility, and that there was a B(1) contract for the construction, design and construction. As part of the termination agreement—and you've said that you've terminated this contract. Have you terminated this contract, or do you intend to terminate this contract?

Mr. GLAUTHIER. Our intention is to do it. We have already indicated we are not going to carry out the full 20-year term of this contract. We have only stopped work on a few selected things so

far, and the negotiations are going on right now in Washington, Washington State, to actually complete its termination. We need to take certain steps such as making sure we have the appropriate rights to use the technology or the design——

Mr. BURR. Let me get into some of those specifics, if I could. As part of the termination settlement, DOE will pay BNFL for the cost of design work so far completed plus profit. In a recent interview DOE indicated that termination costs may be \$245 million. BNFL has asked for \$290 million, which includes \$23 million in profit. However, BNFL's request for \$290- does not include the cost of the pilot melter program or its intellectual property rights. If DOE decides to proceed with BNFL's design with another contractor, DOE will also have to pay BNFL for the pilot melter program and intellectual property rights.

Now, clause h—25(h) of the contract clearly indicates that the total termination costs for BNFL's Hanford contract should not exceed the total funds obligated under clause (h)(2) of the contract. According to (h)(2) of the contract, and I've got that up here, the total obligated funds are \$250 million. Why then is BNFL asking for \$290 million in its June 2, 2000, letter to DOE's contract officer?

Mr. GLAUTHIER. Well, of course, you'll have to ask BNFL why they are asking for that much money.

Mr. BURR. Does DOE plan to obligate more funds to the contract to meet BNFL's request?

Mr. GLAUTHIER. Of course we can't obligate anything more than we actually have authorized. It's possible, I suppose, if we decide that some of these costs were appropriate.

Mr. BURR. You've already told us in your evaluation you've determined that they underperformed or didn't perform, and you've gone through an evaluation to come to a conclusion that you're terminating the agreement, and I would have thought in that thought process that you've looked at the contract, you've seen what you are obligated for, and that you've probably at this point made a determination as to what your obligations are financially to terminate this contract. What are they?

Mr. GLAUTHIER. We have our estimates, but there is a set of legal negotiations that have to go on between the government and the firm to actually establish the specific number, the specific item-by-item responsibilities. I believe I said earlier that we think the cost is going to be in this range of a couple hundred million dollars. I don't have a specific number that I'm willing to pinpoint, but given that kind of cost, we need to be sure we're getting the right value for that, that we are paying for work that has actually been done that we're legally responsible for under the contract.

Mr. BURR. They are asking for \$23 million in profits. Are you legally responsible for that?

Mr. GLAUTHIER. We might be if it's a termination for convenience of the government.

Mr. BURR. Isn't that, in fact—aren't you terminating for convenience?

Mr. GLAUTHIER. That is what our intention is, that's right.

Mr. BURR. So you're obligated for the \$23 million.

Mr. GLAUTHIER. I don't know that specific number. We're obligated for some fee that will be determined. As you indicated, they have not performed all the things they've agreed to perform.

Mr. BURR. BNFL has asked for another \$34 million for the pilot melter program. However, clause (h)(49) of their contract specifically states that DOE can acquire the pilot melter data for a total cost not to exceed \$25 million.

I guess I would ask you does DOE plan to purchase the melter program, and if so, why would BNFL ask for \$34 million if the contract says \$25-?

Mr. GLAUTHIER. I'll give you the Assistant Secretary.

Ms. HUNTOON. I don't know why BNFL asked for \$34-.

Mr. BURR. Has anybody asked?

Ms. HUNTOON. I have not. I will.

Mr. BURR. Did we just reach a point where we've said, you know, the most convenient thing for everybody is to end this contract because we were unclear on the operational stage, so the best thing we can do is part company, fight over what the settlement is, even though it was specified in the contract, and we'll give a little bit, as you said, Assistant Secretary, in reference to Mr. Bryant's question on what additionally will it cost in Oak Ridge, and you said some cost, \$30- to \$50 million. Thirty to \$50 million when I go home is not some cost. It's a hell of a lot of money.

Ms. HUNTOON. May I respond?

Mr. BURR. Yes, ma'am.

Ms. HUNTOON. I did not mean that \$30- to \$50 million wasn't a lot of money. I hope it would be the lower number. What we need to understand is the cost, and I think that's a negotiation that has to take place with the contracting officers and the contractor on this nickel issue.

Mr. BURR. Here's the trouble that I have. Before I was here, I was in the private sector. I wasn't a lawyer, so I didn't try to interpret what a contract said. I read this contract in the layman terms that I could, and it says there is a limit, \$25 million. If X happens, you get \$25 million. The question I asked is very simple. They billed you for \$34-. Are you going to pay them \$25-, or are you going to negotiate something in between, or pay them \$34- which they asked for? I would hope that DOE's answer would be, we wrote a contract. It's \$25-. We're going to pay them \$25-.

Mr. GLAUTHIER. Congressman, our intention is to only pay what we absolutely have to and what we are responsible for.

Mr. BURR. That doesn't answer my question. Is the contract valid?

Mr. GLAUTHIER. The reason I'm giving you the answer I am is that I'm not a contracting officer. I don't know all the elements there.

Mr. BURR. I would hope prior to your testimony here that somewhere within the Department of Energy counsel has sat down and tried to interpret that contract for the questions that you expected that we would ask.

Mr. GLAUTHIER. And the negotiation is actually going on. If there is a limit like that, \$25 million, then I certainly expect our people to pay no more than that. I would hope we will pay less, and we'll just have to do item by item.

Mr. BURR. What you've shared with me is that DOE is currently in negotiations with BNFL to buy out of—to buy out the termination of this contract, and that it's not necessarily the numbers that were established up front that will be the cost of our exit.

Mr. GLAUTHIER. Even in the private sector, which is where I spent most of my career, when you terminate a contract, there's often some legal work that goes on to settle the final cost and that's what we're involved in now.

Mr. BURR. You are also—you also must purchase certain intellectual property rights from BNFL if DOE plans to use their design. Pursuant to clause (h)(25) of the contract, these costs will have to be negotiated with BNFL. One, will you use their design, and if so, have you—can you estimate for us how much you will have to pay for the intellectual property rights?

Mr. GLAUTHIER. To answer the first part, we want to make the design available to bidders who will bid on this. We are not going to require that the bidders use their design or this particular approach, but we do expect that many bidders will do that. So we want to make sure that the rights are available for us to use on the project.

As far as the second part of the question, Carolyn?

Ms. HUNTOON. The second part being the intellectual properties, paying for them again, I think that the discussions with BNFL, what we owe them, are taking place right now out in Washington or have been taking place and will continue until we terminate this contract.

Mr. BURR. So we're negotiating the use of the intellectual property rights? Don't feel bad about saying it, because even in the contract we specified on other things what the amount when negotiating those, so I wouldn't expect—given that there wasn't a specific dollar amount on intellectual property rights, I would expect that we would have to negotiate it. Accepting the fact that there are intellectual rights, that you will accept their design for the project is an acknowledgment that, in fact, they were on the right track, and clearly the evaluation period throughout the process suggested, but up 'til May when the BNFL came in with a new number, their marks weren't too bad throughout the evaluations that were done by land management.

Let me ask one final question. The Chairman has been very patient. How many people do you expect to bid on the new contract?

Mr. GLAUTHIER. I hope we can get as many as possible. We certainly would hope to have at least four serious qualified bidders, but I hope we can do better than that. I hope we can get a higher number.

Mr. BURR. How many do you expect to bid, not hope to bid. How many do you expect to bid?

Mr. GLAUTHIER. I expect to see four bids, or more. Hopefully more.

Mr. BURR. Do you expect those bids to be closer to the 6.9 minus design and—what you negotiate out of this contract, or will they be closer to \$15 billion?

Mr. GLAUTHIER. I hope they are listening to us. We are looking for a good, serious, tight design and for construction cost. That's one reason we've broken it down this way. Design and construction,

that is what it's going to be for the next 7 years. It's a defined period, and people ought to be able to get their arms around that and give us a good tight cost estimate. If it's not closer to our original numbers for that element of the project, then we're not going to be able to do it. Our independent cost estimate gives us some confidence that we will be able to get a bid that's in that range.

Mr. BURR. I would take for granted that since you're hopeful that four people will bid, that you've probably talked to the bidders already. Do you expect BNFL to be one of those four?

Mr. GLAUTHIER. In fact, we have talked to the bidders, and we've a couple of different ways of approaching this. One is that we had a number of the firms who are interested all meet together to get some briefing, information on this out in Washington State, and then about a week or 2 weeks ago, we had firms individually come in and spend about 2 hours each with Ms. Huntoon and her staff and the procurement people to speak specifically about the project.

So we have been actively trying both to make the information available and to encourage active support here.

I'm sorry, the second part of your question?

Mr. BURR. The second part is do you expect BNFL to be one of those four bidders on the second part of the contract that you're currently terminating?

Mr. GLAUTHIER. We're not precluding them. If BNFL wishes to bid, they may do so, but they would certainly have to address the various concerns that we have about the ones I've discussed.

Mr. BURR. Let me rephrase my question. In the four that you've suggested to me, is BNFL one of them?

Mr. GLAUTHIER. No.

Mr. BURR. Thank you. I appreciate both the Secretary and Ms. Jones for another review of similar things that we've looked at, and I yield back.

Mr. UPTON. I yield to the patient Mr. Bilbray.

Mr. BILBRAY. I have no questions at this time.

Mr. UPTON. Mr. Bryant, do you have additional questions?

Mr. BRYANT. No.

Mr. UPTON. I just want to say in conclusion, as we look at all the savings that are added up, could be added up for the fixed-price contracts, this one particular one seems like it's wiped them all away. To go from \$6.9 to \$15.2 billion is a very large sum, and knowing that it still is 20 years away, when I presume neither you or I will be in our present positions, and we wish this subcommittee the very best in those days and hope that this issue is put to rest. And we'll continue to oversee it, and we appreciate your testimony this morning, and we'll excuse you now. Look forward to seeing you probably next week, Wednesday.

At this point, Ms. Jones, if you're able to stay and be able to take some questions.

We will call Mr. Paul Miskimin, the CEO of BNFL, to the table.

Mr. Miskimin, thank you for being patient. As you heard at the beginning, we have a long tradition of taking testimony under oath. Do you have any problem with doing so?

Mr. MISKIMIN. No, sir.

Mr. UPTON. Committee rules allow you to be represented by counsel. Do you wish to have counsel with you?

Mr. MISKIMIN. I have counsel here, yes.

Mr. UPTON. Do you want them to be sworn in as well?

Mr. MISKIMIN. No, sir.

Mr. UPTON. If you wouldn't mind standing and raising your right hand.

[Witness sworn.]

Mr. UPTON. Your testimony has been made part of the record. I would note that we have gone beyond where we thought we'd be at this point timewise. We're going to try to impose a 5-minute standard and be strict with that. You may begin. Thank you.

**TESTIMONY OF PAUL A. MISKIMIN, PRESIDENT AND CHIEF
EXECUTIVE OFFICER, BNFL INC.**

Mr. MISKIMIN. Thank you for the opportunity to testify today, sir. Good morning. I'm Paul Miskimin, president and chief executive officer of BNFL Incorporated, based in Fairfax, Virginia.

Mr. Chairman, in addition to my comments here today, I have a written statement I would like added to the record.

BNFL is a U.S. subsidiary of British Nuclear Fuels plc. It brings to the U.S. nuclear industry the full complement of advanced technologies, management capabilities, record of accomplishment, lessons learned of over 50 years of continuous nuclear fuel cycle and waste management operating experience of its parent company.

Incorporated in Delaware, based in Fairfax, Virginia, and wholly owned by BNFL Nuclear Fuels plc, BNFL Incorporated operates under its own board of directors consisting of three citizens of the United Kingdom and seven citizens of the United States. BNFL Inc. has about 1,000 employees, 93 percent of whom are U.S. citizens.

As the committee is aware, as a result of difficulties associated with traditional cost-type contracts, the Department of Energy chose to award these projects that we're talking about to BNFL either on a fixed-price or privatized basis to transfer more risk and accountability to the contractor, us. These contracts aggressively challenge existing practices for accomplishing the work. BNFL Inc. was willing to bid on and enter into these contracts and accept the associated risks because we have the experience and technical capability to deliver the projects consistent with the government's aggressive schedule.

While each of these projects has had some areas of difficulty, we are pleased to report in each case the government for the first time is presented with the means of accomplishing these major projects significantly within government estimates and requirements.

I'd like to provide some details on the status of our three contracts in Idaho, Hanford and Oak Ridge. Overall cleanup is on track. BNFL has invested almost \$500 million of the company's money in these projects.

Oak Ridge, the ETTP Project. In Oak Ridge we are performing a major decontamination and demolition operation of the equipment and systems of three gaseous diffusion plant buildings that cover 96 acres and contain 126,000 tons of potentially reusable material. This job is being conducted in a partially radioactively contaminated environment by a fully trained and unionized work force of over 600 personnel. They are challenged on a daily basis by the

industrial and radiation hazards associated with cleaning and dismantling these 50-year-old buildings.

The project has had its share of problems, some of which are our making. However, none of the costs associated with these problems that are our responsibility will result in an increase in cost to the government. Most of the contractual difficulties with this project have to do with unforeseen circumstances associated with the definition of the original work scope that could only be discovered once the facility began to be dismantled. We believe these changes to be compensable under the contract. The total request for adjustment that we have submitted for the Oak Ridge Project are \$110 million.

Mr. Chairman, the reality is under any contracting mechanism, a project of this nature and complexity will have numerous developments that call for contract changes. BNFL Inc. will make sure its facility is cleaned up and the project completed in accordance with the contract. This will occur despite the fact that our initial poor performance will cost BNFL Inc. almost \$100 million which it will not recover from the government.

Idaho, the Advanced Mixed Waste Treatment Project. In Idaho we are managing a privatization contract to design, build and operate the Advanced Mixed Waste Treatment Project at the Idaho National Engineering Environmental Lab. The primary purpose of this project is to process and prepare 65,000 cubic meters of transuranic waste for disposal at the Waste Isolation Pilot Plant in New Mexico. The project will help DOE meet court-mandated milestones in the Idaho settlement agreement between DOE, State of Idaho, and the Navy. The settlement agreement requires that 65,000 cubic meters of waste be shipped out of Idaho by December 31 of 2018.

Mr. Chairman, I'd like to say that the GAO's April report on this project is a fair and reasonable representation of the status of the project and is consistent with the status of the project at the time of the review. However, there are some significant points or impressions left by the report that I have addressed in my written testimony.

I am pleased that to date, after 3½ years of diligent efforts to optimize the approach to the project's projected price, the government presently remains very close to that agreed contract signature. While some changes are expected due to government-directed changes, what is assured is that the government will not be obligated to fund cost increases regarding—arising out of our performance.

Last, the Hanford Waste Treatment Plant. Mr. Chairman, as the American public is fully aware, the DOE's Hanford tank waste presents the largest single environmental project in the ongoing efforts to clean up the legacy of the cold war. In August 1998, the BNFL commenced the B-1 Project design phase leading to a final fixed price for service and decision on whether to proceed in August 2000. This is a fixed-scope, self-financed, but cost-reimbursable contract with a \$250 million ceiling to carry out this work.

We had already in 1997 invested in a long lead technology program, about \$25 million, with no DOE backing in order that important technical data would be available and sufficient to support the August 2000 decision date. At the commencement of the B-1 phase, BNFL had completed about 1 percent of the necessary design work.

With so little design work done, no one could offer firm assurances for such a complex and unique project as to what the price for the project would be. Instead, BNFL provided its best assessment based on currently available information that \$6.9 billion was an indicative price, and proposed that as a result of work during the B-1 phase, a 90 percent confidence price would be proposed in April 2000. The price to be proposed in April 2000 was to be the basis for fixed-price contract that the parties contemplated entering in August 2000.

In April 2000, BNFL Inc. submitted a fixed-price proposal for waste processing services totaling \$15.2 billion over the 20-year contract life, doubling the indicative price for the project. As required by our contract, this incorporated a 100 percent private financing package backed by major financial institutions and including a prospective equity commitment of \$400 million by BNFL to be committed for financial closing.

I'm going to skip to the end because I know you are in a time crunch.

I'll just conclude there and open for questions.

[The prepared statement of Paul A. Miskimin follows:]

PREPARED STATEMENT OF PAUL A. MISKIMIN, PRESIDENT AND CHIEF EXECUTIVE OFFICER, BNFL INC.

Good morning. I am Paul Miskimin, President and Chief Executive Officer of BNFL Inc., based in Fairfax, Virginia. BNFL Inc., the U.S. subsidiary of British Nuclear Fuels plc, is a full service nuclear waste management, decommissioning, engineering, and nuclear materials handling company that provides services to both the U.S. Government and the commercial nuclear industry. It brings to the U.S. nuclear industry the full complement of advanced technologies, management capabilities, record of accomplishment, and lessons learned of over 50 years of continuous nuclear fuel cycle and waste management operating experience of its parent company. In fact, the BNFL Group can provide the full spectrum of services across all areas of the nuclear fuel cycle, which it does with numerous customers throughout the world.

As background, BNFL Inc. is a U.S. company, incorporated in Delaware, based in Fairfax, Virginia, and wholly owned by British Nuclear Fuels plc. BNFL Inc. operates under its own Board of Directors, consisting of three citizens of the United Kingdom and seven citizens of the United States. BNFL Inc. has about 1000 employees, ninety three percent whom are U.S. citizens.

We are proud of our technological and operational accomplishments and have been working in the United States over the past 10 years on nuclear cleanup activities to transfer our UK-based technology and operations experience and capability to U.S. government and commercial industry efforts. Three of the projects we are currently performing represent some of the biggest environmental challenges in the United States. These projects are located in the states of Idaho, Tennessee and Washington, and are the subject of today's hearings.

As the Committee is aware, as a result of historical difficulties associated with traditional cost plus award fee contracts, the Department of Energy (DOE) chose to award these particular projects on either a fixed price or privatized basis as an attempt to transfer more risk and accountability to the contractors. These contracts aggressively challenged existing practices for accomplishing the work. BNFL Inc. was willing to bid on and enter into these contracts and accept the associated risks because we were the only company with the experience and technical capability to deliver the projects consistent with the government's aggressive schedule. While each of these projects has had its particular areas of difficulty, we are pleased to report that in each case—even with the issues that are the subject of today's hearing—the government for the first time is accomplishing or has a plan and technologies to accomplish these major projects significantly ahead of any previous government estimate. This is due in part to the capability of the contractor, but also to the fixed price, incentivized nature of the contracts that drive the contractor to develop and settle on solutions to problems, versus continually reworking issues.

The nature of these particular contracts seem to be the central thrust of this hearing, in essence, that fixed price contracts could end up costing the taxpayer more than advertised. In most cases in the commercial environmental cleanup world, fixed price contracts do change in price or cost. However, that does not mean they are a bad contracting tool to deploy in progressing the cleanup of the cold war legacy. The fact of the matter is that this work is challenging, sometimes unpredictable, and often subject to change regardless of the contracting mechanism. The recent General Accounting Office (GAO) report *DOE's Advanced Mixed Waste Treatment Project—Uncertainties May Affect Performance, Schedule, and Price* (GAO/RCED-00-106, April 28, 2000) points out that, "...the Federal Acquisition Regulation allows for price adjustment if, for example, the scope of work changes drastically or BNFL encounters circumstances beyond its control." Even with change, in our estimation fixed price contracts can be a useful alternative to cost plus fee contracts. The DOE considers privatization and fixed price contracts and important part of contract reform, which has been generally endorsed as a positive and necessary effort.

What are the advantages? Typically, because much planning is required prior to establishing fixed price contracts, significant performance and cost risk get transferred to the contractor, and a more rigorous process for justifying cost and other changes results. As the GAO pointed out in its report *Department of Energy: Opportunity to Improve Management of Major System Acquisitions* (GAO/RCED-97-17, Nov. 26, 1996), DOE's traditional method of contracting and managing capital projects through cost type contracts resulted in cost overruns of sixty-three percent in half of the projects completed. Additionally, forty percent of its major projects were terminated after expending over \$10 billion. Should we expect that fixed price contracts would never change in price or cost? Of course not, especially when dealing with 50-year old contaminated buildings that operated in an era of little regulation, or when dealing with first of a kind nuclear projects. What it does mean, however, is that the process for changing those contracts and in changing the cost basis of a project, must always be rigorous but maintain an eye on the ultimate goal; getting the job done at a fair price.

Having discussed fixed price contracts in general, let's take a closer look at BNFL Inc.'s contracts at Idaho, Hanford and Oak Ridge. I'd like to point out to the committee that while there have been price increases due to increased scope or technical issues, there have been no cost overruns associated with either the Hanford or Idaho project, and BNFL Inc. has paid almost all project costs to date. In addition, while a number of figures associated with the Oak Ridge project have been used, the fact remains that any additional costs to the project, not specifically approved through the rigorous change process associated with our contract, will be borne by BNFL. In total, BNFL has invested almost \$500 million to date in these projects. I would also indulge the committee, as a degreed nuclear engineer and a 38-year nuclear industry professional, that comparing problems encountered on the Oak Ridge project to decontaminate and dismantle 50 year old process buildings, and projecting those to projects to design and build new facilities, would be comparing apples to oranges. There is no comparison.

OAK RIDGE ETTP PROJECT

On August 25, 1997, DOE and BNFL signed a \$238 million contract for the East Tennessee Technology Park (ETTP) Three Building Decontamination, Decommissioning and Recycle Project in Oak Ridge, TN. This is a six-year fixed-price contract to dismantle, remove, and decontaminate the process equipment and support systems materials within three gaseous diffusion plant buildings making them available for commercial reuse by the end of 2003. The buildings, which cover a mammoth 96 acres, contain 129,000 tons of potentially reusable metal contained in the process equipment. At the outset, a major challenge for the Project was to safely decontaminate, salvage and recycle this metal—particularly nickel—which would then be credited back into the project to offset costs to the taxpayer.

The project is a major dismantling and demolition operation being conducted in a partially radioactively contaminated environment by a fully trained and unionized workforce of over 600 personnel. They are challenged on a daily basis by the known and unknown industrial and possible radiation hazards associated with cleaning and dismantling these 50-year-old buildings. The capital investments at ETTP originally envisioned to conduct the project have been completed, with the exception of a new massive super-compact, to be completed this fall. The nickel refining technology is fully developed and designed, although construction of the nickel recycle plant is on hold due to DOE's January 2000 nickel moratorium. In addition, sixteen percent of the second floor and 34% of ground floor in K-33 is cleared; 17,000 waste

drums have been removed from ETTP and shipped to Utah for disposal; and material is being removed at about 1,400,000 pounds per week.

The project has also had its share of problems that one could expect with a job this size. Quite frankly, some of these problems were caused by early difficulties on our part in managing the "ramp up" of such a large workforce and project. In fact, my first major management decisions when I joined the company was to reorganize and consolidate our operations in Oak Ridge in September 1999, with a new management team. This team is doing a great job in moving the cleanup forward. Some of the difficulties were due in part to DOE having to work under a new contracting mechanism. Most of the difficulties, however, have to do with changes to or unforeseen circumstances associated with the original work scope that could only have been discovered once the facility began to be dismantled. However, the facts are that even with these challenges, only costs associated with changes to the original work scope and outside of the contractor's control will result in increased price to the government. Any increased costs associated with this project that are within the original parameters of the contract will be borne by BNFL. Our current expected costs to complete the ETTP project are still well below the governments estimate for this project.

Mr. Chairman, this project is being performed by a fully unionized workforce represented by numerous unions that are doing a tremendous job. Unfortunately, as you know, from the outset a single local union that failed to get work on the project opposed this project. The union later enlisted the help of environmentalists who opposed the metals recycling aspect of the project. The labor union and the environmentalists have filed a lawsuit against different aspects of the project; however, the U.S. District Court summarily dismissed their lawsuit. However, as is their prerogative, a decision was later made by the DOE in December 1999 to halt at least one major portion of that contract, the recycling of previously contaminated nickel. This decision eliminated a significant revenue stream contemplated in the contract from the sale of recycled nickel, which affects the financial basis of the project and the contract. The ensuing adjustment that must take place, which will require an increased cost to the government, has been referred to as a cost overrun, however, it clearly is an additional cost to the project resulting from a DOE change in policy outside of the contractor's control. Thus, the contract must be equitably adjusted and the contract clearly provides for that event. On January 12, 2000, DOE issued a draft modification to the contract to implement this decision. The modification ultimately negotiated will have a cost increase of roughly \$40-50 million. The final figure is currently being determined through a negotiation between DOE and BNFL. This is a fairly straightforward example of a change.

Summary of REA's

There are other examples in which the company has experienced conditions and circumstances at the ETTP site that affect project cost and schedule that we believe are compensable under the contract's "Changes" clause. This is accomplished through a very standard government and commercial process in which a contractor submits a Request for Equitable Adjustment (REA). The total requests for adjustment that we have submitted for the Oak Ridge project are \$110 million.

More specifically, on October 28, 1999, BNFL Inc. submitted six REA's to DOE that addressed issues associated with Fire Protection, Storm Damage, Material Quantity Overrun, Crane Delay, Housing Panels, and the Radiation/Criticality Accident Alarm System, which BNFL Inc. has experienced as part of contract performance. The combined value of these REA's was estimated to be approximately \$83 million, of which \$11 million has been incurred and \$72 million was estimated or projected over the remainder of the project life. The REA's were submitted to DOE under the terms of the parties' contract for DOE's review and consideration and in order to allow DOE and BNFL Inc. to mutually mitigate their impact over the remainder of contract performance.

On November 4, 1999, BNFL Inc. submitted three additional REA's associated with nickel loss, chromate duct gaskets and aluminum blades. These REA's are based on factual situations that were unknown to BNFL Inc. at the time of contract negotiation and commencement. The combined value of these three additional REA's was estimated to be approximately \$27 million based on estimates of work to be performed by BNFL Inc. during the remainder of the contract.

BNFL Inc. verbally briefed DOE on all the REA's as submitted. On December 9, 1999, DOE verbally accepted some liability for equitable adjustment for the Storm Damage and the Material Quantity Overrun REA's. BNFL Inc. and DOE had jointly performed a walk-down of the three project buildings to verify that the material quantities in the contract assumptions were accurate. The initial contract estimates were based on DOE's previous contract work. However, BNFL Inc.'s experience in

removing material from the initial phase of K-33 indicated that DOE's estimates of the quantity to be removed were significantly low. All other REA's were verbally rejected.

In February 2000, DOE and BNFL Inc. established negotiating teams to resolve the REA's. The Storm Damage REA was compromised and \$1.9M was paid on June 6, 2000. Extensive discussions have continued with DOE regarding the Material Quantity Overrun REA. Agreement exists regarding the excess quantities; however, DOE has been developing its own independent estimate of the cost of this REA. Discussions on all these issues are ongoing.

ETTP Summary and Path Forward

Mr. Chairman, as with any complex and hazardous technical project, BNFL Inc. has encountered unforeseen difficulties, some significantly affecting the workflow and schedule of the project. The original contract defined contract payments in terms of areas cleared. BNFL Inc. has determined that work can be performed more safely and efficiently with minimal waste by using dedicated crews to clear the building by systems and components rather than by areas. To this end, therefore, BNFL Inc. is financing \$150 million in project costs versus a planned financing of only \$50 million. On our own initiative and at our expense, we are constructing the largest compactor ever used, worldwide, in waste minimization. Of critical importance is that, notwithstanding all of the known and unknown changes to the project, the revised schedule—which adjusts some near-term milestones forward in time—shows that the project completion date is within the original contract completion date. The schedule takes into consideration the expectation that the super-compactor will be operational in December 2000 and includes overtime and double-shift work. The schedule is contingent upon DOE providing government furnished equipment in the form of operational cranes and sufficient electrical power in K-31 and K-29 when BNFL moves into those buildings.

Mr. Chairman, the reality is that under any contracting mechanism, a project as large and complex as this will have numerous developments that call for adjustments. While that does alter the overall price of the project, by performing the project in a fixed price manner, only changes that are outside of the contractor's control will affect the overall cost to the taxpayer. As I stated earlier, all other costs remain the liability of the contractor.

BNFL Inc. is committed to successfully completing this contract in spite of unforeseen challenges and costs in its original fixed price bid. BNFL Inc. will live up to its commitment and make sure that this facility is cleaned up and the project completed in accordance with the contract, knowing that our initial poor performance will cost BNFL Inc. almost \$100 million, which it will not recover from the government. For such fixed price bids, but more importantly, any nuclear cleanup activity to be successful, the customer and the contractor must mutually recognize changed or unforeseen conditions and make prompt equitable adjustments. Trust and cooperation between the parties is essential.

IDAHO—ADVANCED MIXED WASTE TREATMENT PROJECT

I would also like to discuss the Idaho Advanced Mixed Waste Treatment Project (AMWTP) based at the Idaho National Engineering and Environmental Laboratory (INEEL). In December 1996, the DOE awarded BNFL Inc. a privatized, fixed-price contract to design, construct, and operate AMWTP. The primary purpose of the AMWTP is to prepare 65,000 cubic meters of transuranic and low-level mixed waste for disposal at the Waste Isolation Pilot Plant (WIPP). The contract is designed to help DOE meet court-mandated milestones in the Idaho Settlement Agreement between DOE, the State of Idaho, and the U.S. Navy. The Settlement Agreement requires that the 65,000 cubic meters waste be shipped out of Idaho by December 31, 2018.

AMWTP Background

The AMWTP project is divided into three phases. Phase I consists of successfully completing the necessary preliminary permits and approvals, and continues through receipt of final permits expected now in August 2000. Phase II includes the detailed design, equipment development and manufacture, and facility construction, and runs to 2003. Phase III consists of waste retrieval and facility operations, and runs from 2003 through 2018. Following completion of facility operations, the facility will be closed, decontaminated and dismantled within two years.

The project is based at the Radioactive Waste Management Complex on the INEEL, which has received waste from other sites within the DOE complex, principally Rocky Flats. This waste is currently stored above ground, beneath earthen berms within a metal enclosure, and in RCRA-permitted storage modules. The

waste includes low level waste and transuranic wastes. The waste has been characterized by the DOE and its contractor's and is a mixture of physical forms, mostly organic, inorganic and metal. Some of the material is in the form of sludges, which is treated process waste. The waste is contained in drums and boxes that appear to be predominantly in good condition.

AMWTP—Comments on GAO Report

Mr. Chairman, let me first say that the GAO's report, commissioned by this committee, is a fair and a reasonable representation of the status of the project, and is consistent with the status of the project at the time of the review. However there are some significant points or impressions left by the report that must be addressed. Most importantly, there are no cost overruns to the government associated with this project.

Second, even with the delay in the start of construction caused by the delayed issuance of permits due to external factors, the project will be constructed in accordance with our contractual milestones. Third, while the permitting delays have caused a slip in our internal milestones to have the facility commissioned in time to meet the facility operational milestone, other efficiencies will allow for waste shipments out of Idaho to begin ahead of schedule, and consistent with our contractual requirements in support of the Settlement Agreement.

The GAO report also suggests that the DOE's recent decision to defer the incineration of up to 22 percent of the wastes cast in doubt the ability to complete the treatment of wastes on time. The reality is, as a result of working closely with the Department and appropriately amending the contract in certain regulatory areas, we fully expect to complete preparing 97 percent of the wastes for shipment out of the state of Idaho to WIPP significantly before the 2018 milestone. The remaining 3 percent will require some form of treatment. This will be addressed by the Blue Ribbon Panel appointed by DOE to review incineration alternatives, but our own studies suggest that this too can be completed before 2018, even with a delayed start date for this particular step.

AMWTP—GAO Comments on Price

Finally, the GAO states that "the final contract price is uncertain but will likely be higher," and identifies a number of factors that could impact the cost of this project to the government. However, as the report notes, the only effect to date has been a reduction in price of \$18 million negotiated as a result of the reduction of regulatory requirements.

The report also notes that the effect on construction delays could add roughly \$44 million to the contract price in contract adjustment due to permitting delays resulting from the decision to defer incineration. BNFL Inc. does not disagree with that figure, although it is important to note that the costs are not yet fully known, and the consequences of this for price adjustment under the contract is still to be determined. More importantly, the effect of deferral of incineration will not be known until the report of the Blue Ribbon Panel is available later this year and DOE's requirements are known. However, BNFL believes that this potentially can be addressed without increase in cost or price.

It is not possible to speculate how these different issues, and others in the future, will ultimately affect the price of this project to government. It should be noted that the cost of this project, determined through a competitively procurement, is nearly \$700 million lower than the DOE estimate under the traditional M&O approach.

AMWTP Summary

BNFL is pleased that to date, after three and a half years of diligent efforts to reappraise and optimize the approach to the project, the projected costs to government presently remain very close to those agreed at contract signature. Overall BNFL recognizes that under a fixed-price contract in which risks are allocated between the parties, there can be no certainty that the cost to government will not increase, even in the absence of directed changes. However what is assured is that the government will not be obliged to fund cost increases arising out of the contractor's performance.

HANFORD—WASTE TREATMENT PLANT (WTP)

Mr. Chairman, as the American public is fully aware, the DOE's Hanford site presents the single largest challenge in the ongoing efforts to cleanup the legacy of the cold war. In particular, the Hanford tanks --177 underground tanks containing 54 million gallons of highly radioactive waste, 67 of which are presently presumed to leak—present an especially daunting challenge. Numerous initiatives over the years were started (and stopped) in an attempt to address this situation. The committee

is fully aware of the history that led DOE to compete and ultimately selecting BNFL Inc. to pursue a privatized contract for the design, construction and operation of facilities to treat and immobilize these radioactive wastes, known as the Hanford River Protection Project, Waste Treatment Plant (WTP). This led to a phased approach to this large project that has culminated in our submittal of a compliant fixed price proposal of \$15.2 billion, to design, build and operate over the course of 20 years, the largest processing facility in the DOE complex.

BNFL Experience—Applicability to WTP

WTP is a unique, major and complex nuclear processing project. BNFL has completed 40 major nuclear processing projects in the past 20 years including projects comparable in scale and complexity, at a total historic cost of well over \$15B. All these plants have operated successfully, and this experience represents an enormous database from which BNFL draws in approaching new projects.

The most critical lesson from this experience is that before costs, schedule and performance can be confirmed sufficient development must be completed to confirm the choice of technologies and the flow sheet. Furthermore, the plant design must be sufficiently advanced, integrating the requirements of the process flow sheet, nuclear safety, regulatory requirements and operability.

WTP Contract Background

As part of a competitive procurement, BNFL Inc. carried out an initial sixteen-month feasibility study for the treatment and immobilization of Hanford tank wastes over the period October 1996—January 1998. Early on in the course of that study, BNFL Inc. discussed with DOE the need for considerably more project development work before it would be possible for the parties to enter into a privatization contract for fixed price treatment services. As this committee is fully aware, BNFL Inc. proposed in January 1998 to DOE that this be done as “an extended project development phase.” This was negotiated with DOE and eventually commenced in August 1998 as the “B-1 Project Design Phase”, leading to a final fixed price for services and a decision on whether to proceed in August 2000.

BNFL Inc. estimated the cost of this phase at about \$250 million, and having proposed a fixed price contract to perform this work, agreed to what is in effect a fixed scope, self-financed, but cost reimbursable contract with a \$250M ceiling to carry out this work. As an incentive to minimize the cost of prospective services, incentive fees payable under the B-1 contract were to be determined by the cost estimate for those services that resulted from the B-1 work. BNFL Inc. had already (in 1997) invested in a long lead technology program (\$25 million) with no DOE backing, in order that important technical data would be available and sufficient to support the August 2000 decision date.

At the time of completion of the feasibility study in 1998 and the commencement of the B-1 phase, BNFL Inc. had completed at most 1-2% of the necessary design and development work. With so little design work done, no one could offer firm assurances at such an early stage in such a major complex and unique project, as to what the price for the project would be. Instead, BNFL Inc. provided its best assessment, based on currently available information, that \$6.9 billion was an “indicative price”, and proposed that as a result of work during the “extended project development phase”, a 90% confidence price would be proposed in April 2000. This indicative price and the corresponding cost estimate then became the target cost against which incentive fees would be paid for success in B-1. That price to be proposed in April 2000 would have been the basis for a fixed price contract that the parties contemplated entering into in August 2000.

WTP—Part B-1 Deliverables

In April 2000, BNFL Inc. completed a major set of the deliverables due under the contract. These included a large number of technical deliverable: plans, reports, designs, cost estimate, schedule, etc. It also included a fixed price proposal for waste processing services totaling \$15.2 billion over the 20-year contract life. This was based upon the cost estimate and schedule developed, and as required by our contract, a 100% private financing package backed by major financial institutions, and including a prospective equity commitment of \$400M by BNFL to be committed at the financial closing scheduled for August 2000.

The price proposed to DOE by BNFL Inc. in April 2000 was based upon the first detailed cost estimate performed for the project. That estimate was recently completed in March 2000. With an estimate in hand, the project team using the contractually specified pricing model computed the project price. The contract terms set out in great detail and specificity how the price should be developed; principally to protect the government from unjustified price increases.

Each element of BNFL Inc.'s cost estimate and price is supported by detailed technical data, or verifiable assumptions and contract terms. It should be noted that BNFL Inc.'s proposed price was a fixed price over the 20 year term of this contract, and was payable only for completion of productive services, i.e. the delivery of waste processed and immobilized safely and in accordance with the product quality specifications. The increase in our fixed price proposal over our earlier indicative price reflects the transition from an indicative price based upon little information, to a substantiated price based upon detailed plans and proposals, and over 500 vendor quotations. In addition, the increase over the indicative price advised in 1998 corresponds to an annual increase of about 5% per year. This price is fixed and cannot further escalate due to contractor performance.

WTP—Discussion of Current Status

As you know, the DOE has indicated its intent to terminate its "privatized" contract with BNFL Inc. I have discussed the contractual background at some length, Mr. Chairman, because this background is important to any conclusions you may draw about the applicability of and success of the DOE's initiatives at "fixed price" contracting. In addition, there has been much mischaracterization of these matters in the trade and popular press.

I believe that the DOE contracting approach for the Hanford Tank Waste Treatment and Immobilization project has been extremely successful from the government's standpoint. The prospective privatization of the facility, and the prospective contracting of waste processing services at a fixed price, have provided BNFL Inc. with the strongest possible incentives to develop a technically and commercially robust solution. An effective integrated team of over 700 top flight engineers together with supporting staff has been built up since 1998, drawn from the best talent from BNFL and our partners, Bechtel National, SAIC and GTS Duratek.

BNFL has permanently assigned over 70 of its very best and most experienced specialist engineers, in the fields of technology, process design, safety and operations, from the UK to form the technical core of this team. These have been supported with over 100 other specialists on short-term assignments, and access to BNFL's entire network of experience, which includes at our expense about 1000 technologists, engineers and scientists whose job it is to support the operation of these plants and to find better ways of achieving our mission and operating objectives. As I mentioned earlier, the discipline of the prospective fixed price contract has also led BNFL to invest its own money in developing the vitrification technology required for this project. This was necessary almost a year ahead of entering into the B-1 contract in August 1998, in order that there could be sufficient confidence in the technology to support a decision to go forward in August 2000. This, together with the investment of nearly \$250 million for the work in B-1 performed to date, constitutes a major corporate investment by BNFL in the success of this program.

This allocation of corporate resources to support DOE programs is without precedent in the conventional DOE contracting arena, and is the product of the highly incentivized contractual form. Traditional M&O type contracts result in no more than a handful of senior people being assigned to the contract by an incoming contractor, and the investment and assumption of risk is typically limited to the costs of mounting a bid and proposal.

The merits of the privatized and fixed price contracting approach may also be seen in the results produced over this period. All deliverables have been provided in compliance with the contract. As a result, the BNFL team has, for the first time in decades of government spending to address this problem, set out a technically sound solution to immobilizing the Hanford Tank wastes. We have provided a design, a detailed cost estimate and a schedule that can be the basis for proceeding, and that complies with the DOE and the Tri-Party Agreement clean up schedule. This is a design that integrates the demands of technology, process design, safety, operability and product quality assurance. It is robust, and meets the criteria that BNFL has set to merit investment against the disciplines of a fixed price contract for services in a privatized facility. Mr. Chairman, I truly believe that the costs we have derived for this project are soundly based, and provide government for the first time an indication of the financial liability represented by the tank wastes.

WTP Summary

In my view, Mr. Chairman, the fixed price approach to this contract has served the government and the taxpayer well. What has been less successful has been the contractual requirement for 100% private financing, which has resulted in roughly doubling the cost to government through the additional cost of private capital. This feature has proved unaffordable to government. There are, however, other con-

tracting scenarios that could substantially reduce the project price while maintaining a strong incentive structure.

Mr. Chairman, I have deliberately focussed on the beneficial effect that the prospective fixed price terms have had on securing value for the government during the extended project development phase. However, I would like to add one further point: the fixed scope, ceiling price approach to the present B-1 phase has in effect acted like a fixed price. This has delivered the results that DOE has sought, and with changes to the contract value of less than 1%. This is both a recommendation for the contract form, and a tribute to the care with which DOE and BNFL developed the scope prior to commencing work.

CONCLUSION

Mr. Chairman and members of the Committee, thank you for your attention to this matter, and for this opportunity to testify. Fixed price contracting is the most common form of contractual approach used worldwide. Project financing through financial institutions is also a common industry practice. The challenge before the government and industry is whether these useful techniques can be adapted and used to benefit the government and the U.S. taxpayer. Despite problems with the first few projects attempted, significant cleanup progress is being made in many instances, at costs significantly below any previously projected through traditional government contracting practices. After a few short years, it is not yet time to give up on privatization or fixed price contracting as one of many available contracting approaches to address the legacy and challenges of winning the cold war.

Mr. UPTON. Mr. Burr.

Mr. BURR. Thank you, Mr. Chairman.

Why did you bid on Hanford? I just heard your description of the site and the challenges. I've read the contract. You've probably read the contract. Why did the BNFL bid on it?

Mr. MISKIMIN. The BNFL bid on Hanford because it's a job right in our strike zone. It is similar to work that we do for ourselves on our own site in the U.K., and it was an opportunity to do that type of work in the United States and make a fair profit at it.

Mr. BURR. You described the contract as a fixed-price cost reimbursed project.

Mr. MISKIMIN. No, sir. I was reading too fast. I was simply talking about B-1, \$250 million fixed-scope, cost-reimbursable, but it's capped at \$250 million. I wasn't talking about the whole contract.

Mr. BURR. You agree it's capped at \$250 million.

Mr. MISKIMIN. Yes, sir.

Mr. BURR. You billed for \$290 million, right?

Mr. MISKIMIN. That is not the bill. That is the letter we submitted asking for termination costs. Termination costs go beyond—

Mr. BURR. Termination costs is higher than the bill?

Mr. MISKIMIN. There is no bill, sir. We paid for all this ourselves.

Mr. BURR. Higher than the contract-specified amount?

Mr. MISKIMIN. It is higher than the contract-specified amount, yes, because it would also include the cost of preparing the termination package and negotiating another cost not contemplated in the \$250 million.

Mr. BURR. Does the BNFL have a contract with DOE where the scope of the project that was agreed to under the contract has never changed?

Mr. MISKIMIN. Yes. We operate as part of the Westinghouse Savannah River company team at Savannah River site.

Mr. BURR. Subcontract?

Mr. MISKIMIN. Subcontract through Westinghouse to DOE.

Mr. BURR. That's a relationship you have with Westinghouse?

Mr. MISKIMIN. Yes, it is. They are the DOE prime contractor.

Mr. BURR. Clearly with subcontractors we've done a much better job of specifying the scope of work.

On page 17 of your testimony, you pointed out that the merits of fixed-price contracting has served taxpayers well. I think some of us would question that right now, by the way. But you point out that the BNFL has provided all the deliverables in compliance with the contract. But according to DOE, the quality of many deliverables is simply very bad. DOE's recent performance assessment of BNFL's deliverables under the contract, four of the eight assessment criteria show serious problems with your contractual work, business and finance work, management and cost and schedule. Explain for us, if you can, why the line management from DOE has come to that conclusion.

Mr. MISKIMIN. That is hard for me to explain on their behalf, but I will explain it as I see it from my side, from BNFL Inc.'s side.

Although our contract required us to deliver literally thousands of sheets of deliverable to the Department of Energy, there is an extensive list of deliverables that we had to deliver by April 24. That proposal that went in was simply the last of several thousand sheets of deliverable. There are no deliverables that were not delivered.

The comments on the management plan that there was not a senior person designated as the person who would be running the project for several years to come is a view of the Department of Energy, but the next phase of that project was not to start until August, and we have—and there was no requirement in the contract to name that individual. The person that's out at the project now running the transition, the chief operating officer for the company, Philip Strawbridge, was one of the candidates. Also, we were about to turn over the design and build responsibility to Bechtel. That person is not only named, but onsite.

I would say it's a difference of opinion. We have had—

Mr. BURR. Sounds like it's going to be an expensive one for DOE, though.

Mr. MISKIMIN. Will it be expensive for DOE?

Mr. BURR. Yes.

Mr. MISKIMIN. As the Deputy Secretary said, we have a termination negotiations due, and that will be based on case law and a fair negotiation. I hope that it turns out to be a fair negotiation on both sides.

Mr. BURR. Let me ask you, the former CEO of your company visited with us I think it was October 1998, and he committed that the company would work with DOE to develop a fixed price using, and I quote, an agreed-upon formula with our books completely open to DOE, and all the data will be certified cost data. According to recent DOE assessments of your performance, and I think those documents have been put in the record, BNFL has consistently failed to provide certified cost data for the Hanford site. The company's cost documentation is so bad, the Defense Contract Audit Agency has been unable to audit your proposals.

One, have I accurately depicted the situation, and why has BNFL continued to provide what they promised they wouldn't do 2 years ago?

Mr. MISKIMIN. Sir, I have no information that says that the DCAA was unsatisfied with our proposals. In fact, the feedback we have had from the Department of Energy is they liked the product, and they think the estimate was sound and robust. That doesn't say to me that the DCAA had comments. Possibly those were not passed back.

Mr. BURR. This comes out of our packet of information that I got, which was the DOE performance summaries, and on page 44 of the assessment, expectation 4.557.1, DCAA is having difficulty auditing the BNFL cost documentation. Hopefully this is something that they've shared with you, and it's an evaluation of the performance of your company.

Mr. MISKIMIN. The cost data that we submitted in—with our proposal was certified cost and pricing data. What you are showing me is a document I have not seen on the B-2 decision, the final BNFL assessment. I do not know if any BNFL people have seen it.

Mr. BURR. I can appreciate your honesty there, and I'm just sorry that DOE didn't—isn't still around so we could figure out how an assessment of your performance, in fact, couldn't have been shared with you prior to the termination of a multibillion-dollar contract. Clearly we'll have to wait for the next running of Groundhog Day before we get an opportunity to ask what I think is a very vital question.

But it really doesn't answer my question to you, and that is we had a promise, and I realize it was a former CEO, but just like we shared with the Secretary today, we hold Secretary Richardson committed to things Secretary Pena told us. So we hold BNFL committed to the openness and accuracy of their data reimbursement sheets, and if they are hard to understand, I hope, in fact, you will look into the commitments that have been made by prior CEOs and make sure that that commitment is fulfilled.

Mr. MISKIMIN. Yes, sir, I am aware of many of those commitments. I'm not sure what the basis for this is. This would take some discussion. The comment is DCAA is having difficulty auditing the BNFL cost documentation. We have submitted literally thousands of sheets of cost estimate. That by itself could create some difficulty. Also, there are more than 500 vendor quotations that back up the cost information as well as numerous calculations that would make it difficult for anyone, including the DCAA.

Mr. BURR. I've learned in this town to be very specific with my words, so let me take the opportunity to requote your CEO: An agreed-upon formula with our books completely open to the DOE, and all the data will be certified cost data.

And I would only tell you anything short of that would not fulfill the commitment your company has made to this subcommittee 2 years ago.

Let me ask you one last question. Does BNFL plan to bid on the cleanup phase of the Hanford project?

Mr. MISKIMIN. We will not bid as a prime contractor on the design/build phase. There are other options, and that is to go as part of a team—the reason is we are not an engineer constructor. We are not a design/build engineer constructor. That would be companies like Fluor, Bechtel, Stone and Webster, Jacobs and others. We are more of a management, technology and operations company.

The role that Bechtel plays on our team is that of design/build contractor. We are—so we would not bid as a prime on a design/build contractor.

Mr. BURR. Why did you bid originally then?

Mr. MISKIMIN. Because that was not a design/build contract. It's a life cycle cost starting all the way with process design and definition, technology through operations, and we hired Bechtel to do the design and build.

Mr. BURR. I don't know the answer to this question. You might not either, so if you sidestep it, that's fine. If you bid for the clean-up, would that change in any way, shape or form your negotiations on the use of the melter or on the price tag of your intellectual property?

Mr. MISKIMIN. I don't have a good answer for that.

Mr. BURR. The likelihood is that it would be difficult for DOE to pay you for the use of intellectual property if, in fact, you were doing it, wouldn't it?

Mr. MISKIMIN. Yes, sir. If the DOE were to continue us, there's no negotiation for termination.

Mr. BURR. I think a case could be made if they go through with the termination of your contract, and you rebid under a different contract, that they are obligated to the original contract. I think probably the question of the use of your intellectual property, if you were the one using it, might not go very far though.

Mr. MISKIMIN. There's no intention to say charge the Department of Energy twice for anything. If that would give us a competitive advantage, I'd be proud to use it.

Mr. BURR. You have answered the question much more succinctly than I could have. I thank you for your honesty.

Mr. Chairman, I yield back.

Mr. UPTON. Thank you.

Mr. Bryant.

Mr. BRYANT. Thank you, Mr. Chairman. I, too, need to leave here about 5 minutes ago. I've just got one quick series of questions, and then I will yield back my time after this.

Welcome, and I want to refer you to 1997. Your company signed a \$238 million fixed-price contract to clean up three gaseous diffusion plant buildings in Oak Ridge. It recently came to the attention of this subcommittee that you submitted claims for equitable adjustment on a number of issues, thus increasing the cost to the government. Could you explain what mechanism in this fixed-price contract allows you to ask for more money beyond the \$238 million you initially signed up for?

And while you are at it, just the other two questions quickly. Should the government have expected the price of a fixed-price contract to increase, and what is the current status of the project?

Mr. MISKIMIN. Yes, sir. I guess I have to take the disclaimer that I'm not an attorney either, but I have dealt with contracts for a long time. All contracts of the fixed-price nature are subject to change when the scope changes. That's—and that is allowed by the contract.

Would you ask me the second part of it again?

Mr. BRYANT. Should the government have expected the price in a fixed-price contract to increase?

Mr. MISKIMIN. Yes, sir, the government and BNFL should have expected changes on this contract because of the nature of the job. These buildings we're talking about are some of the largest on Earth, half a mile a side on a square building. They haven't been operated for many years. The records are poor. Knowledge of the plant equipment and design is very poor. Most people working today are not knowledgeable of those plants. There are still a few around ready to retire.

We didn't—the Department gave us information based on prior contractor evaluations to bid on. Some of the prior contractor information that the Department provided to us was not correct, such as material quantities. There were design details that have come to light now that we've opened up components and we've opened up systems that neither the Department nor ourselves knew.

In an ideal world there should be no changes, but in a practical world in a facility like this, one should expect change.

Mr. BRYANT. What's the current status?

Mr. MISKIMIN. Current status is that we have submitted a total of nine requests for equitable adjustment totaling \$110 million at face value. One has been settled for storm system damages, which was a force majeure event, at \$1.9 million. That was settled on June 6. One has been withdrawn by us because it relates to nickel. It's the presence of nickel fluoride in the nickel we were to recycle. The other seven are all in discussion and negotiation with the Department of Energy in various stages.

Mr. BRYANT. Thank you.

Thank you.

Mr. MISKIMIN. You're welcome, sir.

Mr. UPTON. Thank you, Mr. Bryant.

I will try to be brief in my questions. You may have heard another vote has been called. So we'll conclude unless Mr. Stupak comes back.

Mr. Miskimin, according to DOE's assessment of your \$15.2 billion fixed-price proposal on Hanford, BNFL made an error related in its tax calculations for the project that created an unnecessary \$1 billion increase in the price. And accounting for that mistake would lower it, in fact, from \$15.2 to \$14.2 billion. Are you aware of that billion-dollar error?

Mr. MISKIMIN. No, sir, I'm not, because we've not had a formal evaluation and feedback by the Department on the proposal.

Mr. UPTON. In your testimony you stated that you formally submitted \$110 million in requests for equitable adjustment on the Oak Ridge contract.

Mr. MISKIMIN. Yes, sir.

Mr. UPTON. But according to the recent DOE response to Chairman Bliley's May 12 letter, BNFL submitted a formal request for \$116 million. In addition, quote, the BNFL orally advised DOE that it intends to submit additional REAs totaling \$54 million covering three other issues. What are the three other issues?

Mr. MISKIMIN. We have no intent to submit additional REAs. That might be old information. I have no explanation for the \$110-versus the \$116- other than a typo.

Mr. UPTON. Ms. Jones, do you have anything that you would like to comment on regarding the testimony?

Ms. JONES. No, not at this point, Mr. Chairman. Thank you.

Mr. UPTON. Well, I'd just might add I appreciate your testimony today. We may have additional questions from both myself and other members of the subcommittee that we'll send in writing. If you could prepare a response within a limited timeframe, that would be appreciated.

Mr. MISKIMIN. Yes, sir. Would be pleased to do it.

Mr. UPTON. Thank you. The hearing is adjourned.

[Whereupon, at 12:37 p.m., the subcommittee was adjourned.]

[Additional material submitted for the record follows:]

BNFL INC.
August 4, 2000

The Honorable FRED UPTON
Chairman, House Commerce Committee
Subcommittee on Oversight and Investigations
U.S. House of Representatives
2125 Rayburn House Office Building
Washington DC 20515-6115

DEAR CHAIRMAN UPTON: Thank you for your letter of July 21, 2000 and for the opportunity to answer your questions for the record in order to complete the Subcommittee's hearing on the Department of Energy's (DOE) fixed-price cleanup contracts.

Enclosed please find my responses to your eleven questions. I hope this information, as well as that provided in my testimony before the Subcommittee, has been useful in your efforts to provided oversight to the DOE's programs.

If you have any further questions or need for information, please contact me at (703) 4602000, or have your staff contact Richard Guay at (202) 785-2635.

Sincerely,

PAUL A. MISKIMIN
President and CEO

Enclosure

ANSWERS TO WRITTEN QUESTIONS

Question 1. Prior to termination, how many personnel did BNFL employ on the Hanford tank waste project?

Answer: Prior to DOE's notice of the termination of our contract, there were a total of 692 personnel on the Hanford project. Of this number, 183 were employees of BNFL Inc. and its UK parent company, British Nuclear Fuels, plc ("BNFL plc"). The remainder of the personnel were employees of our subcontractors such as Bechtel, SAIC, GTS-D or numerous staff augmentation companies.

Question 2. Of the personnel employed by BNFL on the Hanford tank waste project, how many personnel will be transferred or relocated to other BNFL projects? Also, how many personnel will continue on the Hanford tank waste project with BNFL or with another tank waste project contractor?

Answer: Of the personnel employed by BNFL Inc. and BNFL plc working on the Hanford project, approximately 67—representing most of the senior technical and all of the key managerial personnel—have been reassigned or relocated to other BNFL projects and activities. Approximately 94 were laid off or are resigning, but we believe that many of these have found work with other contractors involved at the Hanford site. Another 20 plus BNFL employees will continue working for BNFL at Hanford on close out and termination responsibilities associated with the HANFORD-WTP contract.

Question 3. Please estimate the costs BNFL will request from DOE to pay for intellectual property rights pursuant to clause H.25.g of the Hanford tank waste contract.

Answer: We are not able to provide an estimate of the value of the intellectual property under clause H.25.g at this time. DOE and BNFL are establishing a process whereby BNFL will provide DOE with a list of the H.25.g. background intellectual property, DOE will inform BNFL whether it wants to acquire such intellectual property, and the parties will then negotiate the appropriate value that DOE must pay for the H.25.g. intellectual property.

Question 4. According to DOE's assessment of BNFL's April 24, 2000 \$15.2 billion proposal, BNFL erroneously requested \$600-700 million to pay for property taxes

over the life of the project. Please explain why this error occurred. Please also explain what steps BNFL had taken to convince DOE and the State of Washington to reduce or eliminate property taxes on this project, and whether those efforts were successful.

Answer: As part of its efforts to minimize costs to the project, BNFL Inc. sought relief from state and local property taxes through revision to existing Washington State legislation. Under traditional government contracts, the U.S. Government owns the waste treatment facilities, and they are exempt from state and local property tax. However, in a privatized contract, the Contractor owns the waste treatment facilities and state and local property taxes apply. This anomaly, not intended by DOE, BNFL or the state, would have imposed substantial additional taxes on the cost of the project that would have been ultimately reflected in the price and paid by DOE and the U.S. taxpayer. Due the consequential high price of this tax burden, continued DOE and Congressional support was brought into doubt, hence putting the project in jeopardy.

BNFL Inc., with appropriate DOE support, was successful in getting the State of Washington to enact legislation granting the vitrification project a partial exemption from the state and local property taxes, yielding what was felt to be an appropriate state and local county tax structure in the early years of the project construction.

When BNFL developed its \$15.2 billion fixed price proposal, the detailed financial modeling inappropriately applied an annual tax levy rate to the accreting quarterly capitalized costs of the facility for sizing the property tax component of the price. This resulted in the erroneous high value of the property tax found by DOE in their assessment. When this was pointed out to us, BNFL immediately recognized and acknowledged the situation.

Question 5. The Hanford tank waste contract at clause H.25.h limits the maximum liability for DOE under termination for convenience to the funds obligated under the contract, which is \$250 million. Please explain why BNFL's request for \$290 million is consistent with this clause, and the contract.

Answer: The contract is incrementally funded, which means that funds are not obligated for the full amount of the contract, but are obligated gradually as needed. H.25.h refers to the amount of funds currently obligated under H.2. Prior to the termination announcement, the government had obligated \$250 million. However, the contractor had given the required notice under clause H.2 that more funding would be required in order to continue work and carry out a termination. (The contractor has no obligation to incur costs or face liabilities in excess of obligated funds.) Clause H.37.h.1, as amended, contemplates that funding may be increased to as much as \$316 million. As of this date the funding obligated to the contract for Part B-1 work plus termination, certain other costs, and fees is \$302 million.

Question 6. Please explain whether BNFL has invested more than \$250 million toward the work scopes defined in the 'B-1 Project Design Phase' contract (not including the pilot melter), and, if so, please explain why BNFL has expended funds beyond the \$250 million obligated under the contract.

Answer: At this point, BNFL has invested approximately \$220 million in performing the Part B-1 Design Phase. However, when DOE issued the termination, it triggered additional costs, such as the payoff and termination of subcontractors, severance pay for and relocation of employees, building and equipment lease termination costs and the loss of the undepreciated value of tangible property. In addition, termination triggers formal contract closeout activities and costs. All of these costs, triggered by the termination, account for the difference between the \$220 and the \$302 million currently obligated. However, neither of these figures, include the value of the pilot melter, the value of certain intellectual property and investment in a project associated with the use of the pilot melter. These are investments made by BNFL that are optional to DOE and therefore, are not specifically required to be covered under existing obligation authority.

Question 7. Of the \$290 million in termination cost itemized in BNFL's June 2, 2000 letter to DOE, please identify which costs are associated with preparing the termination package. Please also identify the cost of any other work not included in the scope of the contract, to which you referred in your oral testimony.

Answer: The termination costs itemized in BNFL's letters include three main elements: (a) the costs already expended by BNFL in performing the contract over the last 2 years (approximately \$220 million), (b) the costs that must be incurred by BNFL in order to shutdown its operations and terminate subcontractors including the costs of complying with DOE directions during the termination process and (c) the costs of professional services and other work in preparing and submitting the termination settlement proposal and associated documentation, as required by DOE and the Federal Acquisition Regulations. The third category—the costs of preparing the termination package—is much smaller than any of the other elements. Also, as stated in response to the earlier questions, none of these three elements include the

cost of the pilot melter, the value of certain intellectual property and other BNFL investments in a project associated with the use of the pilot melter.

Question 8. According to testimony from Deputy Secretary Glauthier, BNFL's design pace was very slow. Please explain why BNFL had achieved on a 13% design in its April 24, 2000 proposal, instead of a 30% design which the contract called for.

Answer: There is nothing in BNFL's Hanford contract that requires BNFL to achieve 30% design completion by April 24, 2000 or August 24, 2000. However, we believe that there was a DOE expectation to this effect, based on 1998 conversations and estimates with the BNFL Inc. project manager and BNFL Inc. Chief Executive Officer as a reasonable benchmark for the project.

The DOE expectation was that the project would be at or near 30% design by August 24, 2000. If BNFL Inc. had been allowed to continue its design through this period, rather than being judged on a required deliverable four months ahead of this schedule, we believe that the project would have been very near that point, at roughly 20-25 percent. From a technical perspective, we spent the projected number of design man-hours in B-1 that we had estimated, but because of the increase in the size of the project and facility, as a percentage of the total project, it was less than the 30% we had estimated.

Question 9. BNFL has chosen the "supercompactor" technology to use on the Idaho Advanced Mixed Waste Treatment project. Where has BNFL used this technology and on what type of wastes? Can BNFL use the same kind of equipment it developed in other locations for the Idaho project or will adaptations be required?

Answer: BNFL uses supercompactor technology in processing wastes at its Sellafield reprocessing facility in the U.K. This is used to process plutonium contaminated wastes similar to those to be processed at the Idaho Advanced Mixed Waste Treatment Project (AMWTP), and also low level radioactive wastes. In order to provide maximum assurance of project success, BNFL has minimized the design changes incorporated in the AMWTP supercompactor, while incorporating some improvements that have resulted from its U.K. experience.

Question 10. According to your testimony, BNFL's "initial poor performance will cost BNFL almost \$100 million, which it will not recover from the government." Please describe the specific elements and causes of this poor performance, the costs associated with each element of poor performance, and why BNFL believes these costs are not recoverable under the contract. Please also indicate whether similar costs would be recoverable under a cost-plus type of contract.

Answer: In my testimony before the Subcommittee I acknowledged that BNFL's initial performance under the ETTP contract was poor and will cost our company almost \$100 million. This poor performance resulted from a number of contributing factors, including unforeseen technical challenges and early difficulties in managing the "ramp up" for such a large workforce and project. The resulting costs will be borne by BNFL rather than the government because the costs do not stem from any change to the scope or requirements of the ETTP contract.

More specifically, the main contributing elements were in the areas of contractually quantifying high-risk areas, initial project management errors in ramping up the project, and failing to include adequate contingency. Under a typical cost plus arrangement, DOE would pay for all costs associated with these performance issues, and while it is difficult to put a precise estimate on the cost breakdown of their impact, a reasonable approximation would be \$50 million, \$30 million and \$20 million, respectively.

Question 11. Please explain how Secretary Richardson's imposed moratorium preventing the sale of potentially contaminated scrap metals announced July 13, 2000, will impact BNFL's cost, schedule, and performance under the Oak Ridge ETTP contract.

Answer: Based on DOE's plans, as we understand them, DOE will simply purchase all decontaminated materials from BNFL, rather than having us sell it to scrap dealers on the open market. Thus, BNFL will continue releasing materials (but to DOE not the market) based on our original contractual agreement and in compliance with the legal standards. It is BNFL's understanding that DOE will monitor the materials, segregate those that do not meet a Zero Detectable Limit, and dispose of the materials once a DOE national standard is established.

If this DOE plan remains in effect and is fully funded, then it appears that the Secretary's decision will have little or no impact on the ability of BNFL to perform the contract. However, there likely will be increased cost adjustments to the government and some small adjustments to deliver or package the material directly to DOE.

RESPONSES FOR THE RECORD OF HON. T.J. GLAUTHIER, DEPUTY SECRETARY OF
ENERGY

Question 1. Please explain how Secretary Richardson's imposed moratorium preventing the sale of potentially contaminated scrap metals announced on July 13, 2000, will impact the cost and schedule for the Oak Ridge ETP contract with BNFL.

Answer 1. As a result of the Secretary's July 13, 2000, decision, we have directed the contractor to temporarily suspend the unrestricted release for recycling of scrap metals from radiological areas at the ETP. In addition, the Department has indicated that it will buy and store any of this scrap metal that would have been released for recycling while the Department develops procedures through a public process to improve existing policies and practices for managing and releasing excess materials. The new procedures, to be completed by December 31, 2000, will also ensure that there is no release of scrap metals for recycling if contamination from DOE operations is detected using appropriate, commercially available monitoring equipment and approved procedures.

The Department is currently working with BNFL to modify their contract to implement the Secretary's decision, and reflect the revised approach for conducting work without impacting cleanup schedules or workforce. Because the terms and conditions of the contract modification are still being developed, we cannot be more precise about any cost or schedule impact to the contract at this time.

Hanford BNFL Contract

Question 2. The Hanford tank waste contract at clause H.25.h limits the maximum liability for DOE under a termination for convenience to the funds obligated under the contract, which is \$250 million. Please explain why BNFL's request for \$290 million is consistent with this clause.

Answer 2. Contract Clause H.25.h limits DOE's liability to the funds obligated to the contract under Clause H.2, Obligations of Funds. Contract clause H.2 states that "The Contractor will notify the Contracting Officer in writing whenever it has reason to believe that the amounts incurred, plus the estimated amounts to be incurred under this Contract in the next 120 days, less all payments previously made against those costs, if any, will in the event of termination for convenience, or otherwise, result in an amount to be due from DOE which exceeds the amount which has been obligated by DOE as specified in this Clause H.2." Consistent with this contract clause, it is important to note that the Part B-1 cost ceiling amount of \$250 million (as modified through Modification No. M014) is not the sum total of the Government's funding liability under this contract for Part B-1. The Government is obligated to also fund imputed interest on the \$250 million cost of Part B-1 performance, earned profit, plus allowable termination costs. BNFL's June 2, 2000 letter, which requested that the amount obligated to the contract be increased to \$290 million, was submitted pursuant to Clause H.2, as was its July 19, 2000 letter requesting that the amount be increased to \$308 million.

At the time of termination, the Contracting Officer had obligated \$250 million to the contract for Part B-1, and a total of \$302 million was obligated on the contract as of July 21, 2000. Of the amount obligated, \$100 million has actually been paid to the contractor (on August 4, 2000).

BNFL Hanford tank waste contract

Question 3. If any of BNFL's deliverables are considered by DOE to be non-responsive, is BNFL entitled to full reimbursement for the costs of these deliverables under a termination for convenience?

Answer 3. Under a termination for convenience and subject to the limitations set out in the contract, BNFL is entitled to recover 1) the costs incurred in performing the work terminated; 2) the costs of settling and terminating subcontracts; 3) a reasonable profit on the terminated work; and 4) reasonable costs of the termination settlement (including accounting and legal expenses). However, with respect to contract deliverables, clause H.37.b. of the contract limits BNFL's recovery in the event that rework is required to produce deliverables which conform to the Statement of Work requirements. The cost of rework must be separately accounted for and, to the extent such cost, when added to the amounts which would be due BNFL in the event of a termination for convenience, exceeds the Part B-1 ceiling amount (\$250 million), then the excess cost of the rework is not allowable. Accordingly, BNFL will recover the costs it incurred in producing the contract deliverables as part of its termination settlement, subject to the limitation on recovery for rework cost and any other limitations set out in the contract.

Hanford BNFL Contract

Question 4. Please explain whether BNFL has in its \$290 million request any costs for work not included in the scope of the Hanford tank waste contract. Please also explain what portion of BNFL's \$290 million request is associated with termination costs outside of the work scope of the contract.

Answer 4. All work performed under the BNFL contract is and has been within the scope of work of the contract. There is no amount obligated to this contract for work outside the scope of the Hanford tank waste contract. The notice of termination for convenience issued by DOE to BNFL on June 29, 2000, provided instructions to BNFL and triggered a series of contract clauses and regulatory provisions that required BNFL to perform certain activities related to contract termination to preserve and protect property in which the Government has or may acquire an interest.

BNFL's current estimate of termination costs submitted to the Department on July 19, 2000 is:

BNFL's Estimated Termination Costs	In Millions of Dollars
Undepreciated Value of Tangible Property	7.0
Bldg Lease Termination Liability	1.0
Subcontract Termination Costs	9.0
Richland Closeout Costs*	11.0
Professional Services for Closeout	5.0
BNFL HQ Termination Expenses	8.0
Relocation BNFL UK	2.0
Severance	0.3
BNFL G&A	3.0
BNFL HQ Support	3.0
Fee	22.0
Interest	10.0
Facilities Capital cost of Money	0.5
B&O Tax	1.0
Total Estimated Termination Costs	83.0

*Reduced from the estimate submitted by BNFL on July 19, 2000 as a result of discussions between BNFL and DOE.

While DOE believes that BNFL's termination costs have been over-estimated by BNFL, during the contract closeout process the Defense Contract Audit Agency will review the costs to assist in the Contracting Officer's determination of BNFL's allowable termination costs.

Hanford BNFL Contract

Question 5. According to DOE's assessment of BNFL's April 24, 2000 \$15.2 billion proposal, BNFL erroneously requested \$600-\$700 million to pay for property taxes over the life of the project. Please explain why this error occurred.

Answer 5. In the months prior to the BNFL submittal, there were discussions held between the State of Washington and BNFL regarding the waiving of property taxes. These discussions finally resulted in State legislative action to reduce taxes in the near-term (apparently based upon BNFL's ability to meet Tri-Party Agreement Compliance milestones regarding construction of the facility) and waive out-year property taxes. The erroneous inclusion of the \$600-\$700 million (including financing impacts) for payment of Washington State property taxes appears to be the result of a quality assurance lapse at BNFL, and was attributed by BNFL to a lack of understanding of Washington State Property tax law, and the unavailability of a key individual during the final review process for the document. When DOE brought the error to BNFL's attention, the error was quickly corrected.

Oak Ridge ETP Contract with BNFL

Question 6. Please describe BNFL's contract performance with respect to submitting certified cost and pricing data during the period of both the Hanford tank waste contract and the Oak Ridge ETP contract.

Answer 6. As part of an April 24, 2000 deliverable submittal, BNFL provided cost and pricing data for the Hanford tank waste project. While the data were presented in a format that made audit activities more difficult than expected, the contracting officer considered the data compliant with Federal Acquisition Regulation (FAR) requirements. The Defense Contract Audit Agency (DCAA) audit was never completed due to the termination of the BNFL contract.

For the Oak Ridge ETP contract, BNFL submitted certified cost and pricing data prior to contract award on August 25, 1997. Since that time, the Department has

negotiated a number of modifications to the contract. BNFL has submitted certified cost and pricing data for all modifications prior to the date the modifications were signed where the price met the statutory and FAR threshold of \$500,000 for submission of such data.

DCAA is currently auditing a contract modification dated May 24, 2000, for which BNFL submitted certified cost and pricing data for a negotiated price of \$1.965 million for storm damage to the K-33 building. The contract modification provides that this negotiated price may be adjusted upward or downward to reflect the results of the DCAA audit.

Hanford BNFL Contract

Question 7. The Secretary has set an aggressive schedule of January 15, 2001, to bid and award a new contract for the Hanford tank waste project. Given the problems experienced on this contract to date, please explain why DOE must commit to a new path forward and select a new contractor so quickly.

Answer 7. The Department of Energy remains committed to protecting the Columbia River by moving forward with a new contract for design and construction of a treatment and immobilization plant for Hanford Tank waste. DOE has established this schedule to keep its commitments under the Tri-Party Agreement to begin processing tank waste by 2007.

Pit 9 Litigation

Question 8. Please describe the current status of the ongoing Pit 9 litigation with Lockheed Martin.

Answer 8. The Pit 9 litigation arises out of a \$180 million fixed-price subcontract to remove and process, on a demonstration basis, all of the radioactively contaminated waste buried in Pit 9, one of many pits and trenches in the Subsurface Disposal Area. The subcontract was awarded in 1994 by the predecessor of Lockheed Martin Idaho Technologies Co. (LMITCO), and at the time, the management and operating (M&O) contractor for Idaho National Engineering Environmental Laboratory (INEEL) to Lockheed Martin Advanced Environmental Systems, Inc. (LMAES), another wholly owned subsidiary of Lockheed Martin Corporation (LMC). LMITCO subsequently replaced EG&G as the M&O contractor at the INEEL. In 1998, after LMAES failed to perform, LMITCO terminated the subcontract for default. LMC and LMAES then immediately filed suit in the United States Court of Federal Claims alleging, *inter alia*, that DOE had converted the Pit 9 subcontract into a prime contract with the federal government and that the termination for default was improper. In furtherance of its theory, LMC filed a certified administrative claim with DOE for \$211 million (later revised for over \$300 million). After an unsuccessful demand for repayment, LMITCO filed suit against LMAES in the United States District Court for the District of Idaho seeking return of \$54 million which LMITCO had advanced pursuant to that subcontract and for other remedies.

In the Idaho case, the parties are currently engaged in an extensive discovery schedule which will not be completed until 2002. This will involve the production of all non-privileged documents concerning Pit 9 by both parties and DOE and the depositions of numerous individuals who participated in the project.

In the case before the Court of Federal Claims, the United States moved to dismiss the complaint for lack of jurisdiction because DOE was not a party to the subcontract which was executed, administered, and terminated by LMITCO. The Court initially denied that motion into a motion for summary judgement on which the Court could make a dispositive ruling. The parties subsequently agreed to that procedure and the Court has ordered the parties to file cross-motions for summary judgement on the threshold jurisdictional issue. While the government's motion is currently due on September 1, 2000, Lockheed is presently in the process of requesting an extension of the briefing schedule.

Fixed-Price Contracts

Question 9. According to your testimony, the Office of Environmental Management manages 37 fixed-price contracts. Please list each contract. For each contract, please also provide the original contract value, the total funds spent to date, the DOE site where the contracted work is located, the number of requests for equitable adjustment (REAs) that have been requested on each contract, the total costs to the contract agreed to by DOE as a result of REAs, the year the contract was signed, the year the project was originally agreed to be completed, and the current date for project completion.

Answer 9. Because of the extent of data requested and the need to work with more than ten DOE Headquarters and Field Offices to compile the necessary information, the Department requires additional time to provide a complete response. We expect to provide a response within a month.